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LIST OF ABBREVIATIONS OF PRINCIPAL AUTHORS AND WORKS

Aët	Aëtius
Plac.	*De placitis*
Ath.	Athenaeus
Albin.	Albinus
Prol.	*Prologos*
Alcin.	Alcinous
Did.	*Didaskalikos* (*Handbook of Platonism*)
Alex.	Alexander of Aphrodisias
in Metaph.	*Commentary on Aristotle's Metaphysics*
in Meteor.	*Commentary on Aristotle's Meteorolgy*
Quaest.	*Quaestiones*
Anon. *in Plat. Theat.*	Anonymous Commentary on Plato's *Theatetus*
Apul.	Apuleius
De Plat.	*De dogmate Platonis* (*On Plato and his doctrine*)
Int.	*De interpretatione*
Ar.	Aristophanes
Nub.	*Nubes* (*Clouds*)
Arist.	Aristotle
An. post.	*Analytica posteriora*
An. pr.	*Analytica priora*
Cael.	*De caelo*
Cat.	*Categories*
De an.	*De anima* (*On the soul*)

De motu an.	*De motu animalium*
De resp.	*De respiration*
Eth. Eud.	*Ethica Eudemia*
Eth. Nic.	*Ethica Nicomachea*
Gen. an.	*De generatione animalium*
Gen. corr.	*De generatione et corruptione (On coming-to-be and passing-away)*
Hist. an.	*Historia animalium*
IA	*De incessu animalium (On the motion of animals)*
Int.	*De interpretatione*
Mem.	*De memoria*
Metaph.	*Metaphysics*
Mete.	*Meteorologica*
[MXG]	*On Melissus, Xenophanes, and Gorgias*
Part. an.	*De partibus animalium (On the parts of animals)*
Parv. nat.	*Parva naturalia*
Ph.	*Physics*
Poet.	*Poetics*
Pol.	*Politica*
[Probl.]	*Problemata*
Rh.	*Rhetoric*
Sens.	*De sensu*
Soph. el.	*Sophistici elenchi*
Top.	*Topics*
August.	Augustine
C. acad.	*Contra academicos*
Conf.	*Confessions*
De civ. D.	*De civitate Dei*
Ep.	*Epistulae*
Serm.	*Sermones*
Calc.	Calcidius
in Tim.	*Commentary on Plato's Timaeus*
Cic.	Cicero (Marcus Tullius)
Acad.	*Academica*
Att.	*Epistulae ad Atticum (Letters to Atticus)*
Fat.	*De fato*
Fin.	*De finibus*
Inv.	*De inventione*
Leg.	*De legibus*
Nat. D.	*De natura deorum*
Off.	*De officiis*
Orat.	*Orator ad M. Brutum*
Rep.	*De republica*
Top.	*Topica*
Tusc.	*Tusculanae disputationes*

CMG	*Corpus medicorum graecorum*
Dam.	Damascius
in Phil.	*Commentary on Plato's Philebus*
Princ.	*On First Principles*
Dexippus	
in Cat.	*Commentary on Aristotle's Categories*
Diels	
Dox. Graec.	H. Diels, *Doxographi Graeci*
Dio. Chr.	Dio Chrysostom (also sometimes known as Dio Cocceianus)
Or.	*Orations*
Diog. Laert.	Diogenes Laertius
DK	H. Diels and W. Kranz, *Die Fragmente der Vorsokratiker*
Epict.	Epictetus
Dis.	*Discourses*
Ench.	*Encheiridion* (*Handbook* or *Manual*)
Epicurus	
Ep. Hdt.	*Epistula ad Herodotum* (*Letter to Herodotus*)
Ep. Men.	*Epistula ad Menoeceum* (*Letter to Menoeceus*)
Ep. Pyth.	*Epistula ad Pythoclem* (*Letter to Pythocles*)
Sent. Vat.	*Vatican Sayings*
RS	*Ratae sententiae* = *Kyriai Doxai*
Euclid	
El.	*Elements*
C. N.	*Common Notions*
Euseb.	Eusebius
Hist. eccl.	*Historia ecclesiastica*
Praep. evang.	*Praeparatio evangelica*
Gal.	Galen
Aff. dig.	*De propriorum animi cuiuslibet affectuum dignotione et curatione* (*On the passions of the soul*)
Caus. puls.	*De causis pulsuum* (*On the causes of the pulse*)
Comp. med. gen.	*De compositione medicamentorum per genera* (*On the composition of drugs according to kind*)
De loc. aff.	*De locis affectis* (*On affected parts*)
Diff. feb.	*De differentiis febrium* (*On different fevers*)
Foet. form.	*De foetuum formation* (*On the growth of foetuses*)
Hipp. epid.	*Commentary on Hippocrates' Epidemics*

Hpp. off. med.	*Commentary on Hippocrates' On the role of the doctor*
Libr. Propr.	*De libris propriis* (*On his own writings*)
MM	*Methodi medendi* (*Techniques of healing*)
Nat. fac.	*De naturalibus facultatibus* (*On natural faculties*)
Opt. doctr.	*De optima doctrina* (*On the best*
Opt. med.	*Quod optimus medicus sit quoque philosophus* (*The best doctor must also be a philosopher*)
Ord. lib. prop.	*De ordine librorum suorum* (*On the order of his own writings*)
Pecc. dig.	*De animi cuiuslibet peccatorum dignotione et curatione* (*On the errors of the soul*)
PHP	*De Hippocratis et Platonis decretis* (*On the opinions of Hippocrates and Plato*)
Praen.	*De praenotione* (*On prognosis*)
Prop. plac.	*De proprius placitis* (*On his own opinions*)
QAM	*Quod animi mores corporis temperamenta sequantur* (*That the qualities of the mind depend on the temperament of the body*)
SM	*Scripta minora*
Subst. nat. fac.	*De substantia facultatum naturalum* (*On the subsistence of natural faculties*)
UP	*De usu partium* (*On the usefulness of parts*)
Gell.	Aulus Gellius
NA	*Noctes Atticae* (*Attic Nights*)
Hdt.	Herodotus
Hes.	Hesiod
Theog.	*Theogony*
Hippol.	Hippolytus
Haer.	*Refutatio omnium haeresium* (*Refutation of all heresies*)
Hom.	Homer
Il.	*Iliad*
Od.	*Odyssey*
Hor.	Horace
Carm.	*Carmina* (*Odes*)
Iambl.	Iamblichus
De com. math. sc.	*De communi mathematica scientia*
Myst.	*De mysteriis*
VP	*De Vita Pythagorica*
Julian	
Or.	*Orations*

Lactant.	Lactantius
Lucian	
Vit. auct.	*Vitarum auctio* (*Philosophers for sale*)
Lucr.	Lucretius
Max. Tyr.	Maximus of Tyre
Or.	*Orations*
Num.	Numenius
Olymp.	Olympiodorus
in Alc.	*Commentary on Plato's First Alcibiades*
in Meteor.	*Commentary on Aristotle's Meteorology*
in Phaed.	*Commentary on Plato's Phaedo*
Phil. Alex	Philo of Alexandria
Op.	*De opificio mundi*
Philoponus	
Aet. Mundi	*On the eternity of the cosmos*
in De an.	*Commentary on Aristotle's De anima*
Phot.	Photius
Bibl.	*Bibliotheca*
Pl.	Plato
Alc.	*Alcibiades*
Ap.	*Apology*
Chrm.	*Charmides*
Cra.	*Cratylus*
Cri.	*Crito*
Criti.	*Critias*
Euthd.	*Euthydemus*
Ethphr.	*Euthyphro*
Grg.	*Gorgias*
Hp. mai.	*Hippias maior*
Hp. mi.	*Hippias minor*
Lach.	*Laches*
Leg.	*Leges* (*Laws*)
Menex.	*Menexenus*
Men.	*Meno*
Phd.	*Phaedo*
Phdr.	*Phaedrus*
Phlb.	*Philebus*
Plt.	*Politicus* (*Statesman*)
Prm.	*Parmenides*

Prt.	*Protagoras*
Resp.	*Respublica* (*Republic*)
Symp.	*Symposium*
Soph.	*Sophist*
Tht.	*Theaetetus*
Ti.	*Timaeus*
Plin.	Pliny (the Elder)
HN	*Naturalis historia*
Plin.	Pliny (the Younger)
Ep.	*Epistulae* (*Letters*)
Plot.	Plotinus
Enn.	*Enneads*
Plut.	Plutarch
Ad. princ. inerud.	*Ad principem ineruditum* (*To an uneducated ruler*)
Adv. Col.	*Adversus Colotem* (*Against Colotes*)
An seni	*An seni respublica gerenda sit* (*On whether an old man should be a ruler*)
Cat. mai.	*Cato maior* (*Cato the Elder*)
Comm. not.	*De communibus notitiis adversus Stoicos* (*Against the Stoics on common opinions*)
De an. proc.	*De animae procreatione in Timaeo* (*On the generation of the soul in Plato's Timaeus)*
De def. or.	*De defectu oraculorum* (*On the obsolescence of oracles*)
De E	*De E apud Delphos* (*On the E at Delphi*)
De exil.	*De exilio* (*On exile*)
De Is. et Os.	*De Iside et Osiride* (*On Isis and Osiris*)
De lat. viv.	*De latenter vivendo* (*On Epicurus' advice to 'Live unknown'*)
De prof. virt.	*De profectu in virtute* (*On progress in virtue*)
De Pyth, or.	*De Pythiae oraculis* (*On the oracles at Delphi*)
De sera	*De sera numinis vindicta* (*On the delays of divine vengeance*)
De tranq. anim.	*De tranquillitate animi* (*On the tranquility of the soul*)
Dion	*Life of Dion*
Phoc.	*Life of Phocion*
Quaest. conv.	*Quaestiones convivales*
Quaest. Plat.	*Quaestiones Platonicae*
Stoic. repug.	*De Stoicorum repugnantis* (*On Stoic self-contradictions*)
Virt. mor.	*On virtue of character*
Porph.	Porphyry
in Cat.	*Commentary on Aristotle's Categories*
in Ptol. Harm.	*Commentary on Ptolemy's Harmonics*
Sent.	*Sentences*
VP	*Vita Plotini* (*Life of Plotinus*)

POxy.	Oxyrhynchus papyrus
Ps.-Crates	Pseduo-Crates
Ep.	*Epistulae* (*Letters*)
Ps.-Diog.	Pseudo-Diogenes
Ep.	*Epistulae* (*Letters*)
Pseudo-Simplicius	
in De anima	*Commentary on Aristotle's De anima* (Sometimes this work is attributed to Priscian of Lydia.)
Proclus	
ET	*Elements of Theology*
in Eucl.	*Commentary on Euclid's Elements*
in Prm.	*Commentary on Plato's Parmenides*
in Tim.	*Commentary on Plato's Timaeus*
TP	*The Theology of Plato*
Quintilian	
Inst.	*Institutio oratoria*
Sen.	Seneca (the Younger)
Ben.	*De beneficiis* (*On benefits*)
Clem.	*De clementia* (*On mercy*)
Ep.	*Epistulae* (*Letters to Lucilius*)
Q. Nat.	*Quaestiones naturales* (*Natural questions*)
Tranq.	*De tranquillitate animi* (*On the tranquility of the soul*)
Sext. Emp.	Sextus Empiricus
Math.	*Adversus mathematicos*
Pyr.	*Pyrrōneion Hypotupōseōn* (*Outlines of Pyrrhonism*)
Simpl.	Simplicius
in Cael.	*Commentary on Aristotle's De Caelo*
in Cat.	*Commentary on Aristotle's Categories*
in Phys.	*Commentary on Aristotle's Physics*
SSR	G. Giannantoni, *Socratis et socraticorum reliquiae*
Stob.	John Stobaeus
Anth.	*Anthology*
Suda	Greek Lexicon formerly known as Suidas
Syr.	Syrianus
in Metaph.	*Commentary on Aristotle's Metaphysics*

Theoph.	Theophrastus
Metaph.	*Metaphysics*
Phys. Op.	*Tenets in Natural Philosophy*
Sens.	*De Sensibus*
Verg.	Virgil
Aen.	*Aeneid*
G.	*Georgics*
Xen.	Xenophon
Ap.	*Apologia Socratis*
Mem.	*Memorabilia*
Oec.	*Oeconomicus*
Symp.	*Symposium*
Xenocr.	Xenocrates

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(1995), *Antike Lebenskunst. Glück und Moral von Sokrates bis zu den Neuplatonikern* (1998), and *Einführung in die Politische Philosophie* (2nd edition, 2009). With James Wilberding, he edited *Neoplatonism and the Philosophy of Nature* (2012).

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Gabriel Richardson Lear is Professor of Philosophy and the Committee on Social Thought at the University of Chicago. She has written about Plato's and Aristotle's conceptions of beauty as it relates to their moral and aesthetic theories. She is the author of *Happy Lives and the Highest Good: An Essay on Aristotle's Nicomachean Ethics* (2004).

Alex Long is Lecturer in Classics at the University of St Andrews. He translated Plato's *Meno* and *Phaedo* for *Cambridge Texts in the History of Philosophy* and is the author of *Conversation and Self-Sufficiency in Plato* (2013). He is also the editor of *Plato and the Stoics* (2013).

Hendrik Lorenz is Professor of Philosophy at Princeton University. He is the author of *The Brute Within: Appetitive Desire in Plato and Aristotle* (2006) and various articles on Plato and Aristotle.

Stephen Makin is a Reader in Ancient Philosophy at the University of Sheffield. He is the author of *Indifference Arguments* (1993) and *Aristotle: Metaphysics Theta* (2006).

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Épicure, Lucrèce (2000), *Aristote: Une philosophie de l'activité* (2003), *De la matière à l'action: Aristote et le problème du vivant* (2007), and *Epicure. La nature et la raison* (2009). He has recently translated Epicurus' Letters and maxims into French: *Épicure, Lettres, maximes et autres textes* (2011).

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Michael Pakaluk, Professor of Philosophy at Ave Maria University in Naples, Florida, and sometime Fellow at the Wheatley Institution, is the author of the Clarendon Aristotle volume on *Nicomachean Ethics* VIII and IX (1998), *Aristotle's* Nicomachean Ethics*: An Introduction* (2005), and, most recently, with Giles Pearson, *Moral Psychology and Human Action in Aristotle* (2011).

John Palmer is Professor of Philosophy at the University of Florida. He is the author of *Plato's Reception of Parmenides* (1999) and of *Parmenides and Presocratic Philosophy* (2009).

Giles Pearson, Lecturer in Philosophy, University of Bristol, is the author of *Aristotle on Desire* (2012), and co-editor with Michael Pakaluk of *Moral Psychology and Human Action in Aristotle* (2011).

Tobias Reinhardt is Corpus Christi Professor of the Latin Language and Literature in the University of Oxford. He is the author of *Das Buch E der aristotelischen Topik: Untersuchungen zur Echtheitsfrage* (2000), *Cicero's Topica: Critical Edition, Translation, Introduction, and Commentary* (2003) and, with Michael Winterbottom, *Quintilian, Institutio Oratoria Bk. 2* (2006).

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Dominic Scott is Professor of Philosophy at the University of Virginia and an Emeritus Fellow of Clare College, Cambridge. He is the author of *Recollection and Experience* (1995), *Plato's Meno* (2006) and numerous articles on ancient ethics and epistemology.

Frisbee C. C. Sheffield is Director of Studies in Philosophy at Christ's College Cambridge. She is the author of *Plato's Symposium: The Ethics of Desire* (2006). She co-edited a collection of articles, *Plato's Symposium: New Issues in Interpretation and Reception* (2006), and co-authored the recent edition of *Plato: Symposium* for Cambridge Texts in the History of Philosophy (2008).

Christopher Shields is Professor of Classical Philosophy in the University of Oxford and a Fellow of Lady Margaret Hall. He is the author of *Order in Multiplicity: Homonymy in the Philosophy of Aristotle* (1999), *Classical Philosophy: A Contemporary Introduction* (2003), *Aristotle* (2007), *Ancient Philosophy: A Contemporary Introduction* (2011), and, with Robert Pasnau, *The Philosophy of Thomas Aquinas* (2003). He is the editor of *The Blackwell Guide to Ancient Philosophy* (2002) and *The Oxford Handbook of Aristotle* (2012), and *Aristotle's De Anima, Translated with Introduction and Commentary* (2014).

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INTRODUCTION

James Warren

European philosophy began in the Greek world, probably at some time early in the sixth century BC. Just 250 years later, Greece had already produced three of the most brilliant and influential philosophers ever: Socrates, Plato, and Aristotle; and the philosophical traditions of the Greek world that flourished in Athens in the later fifth and fourth centuries BC went on after Aristotle to develop and thrive under the political dominance of Rome until the end of antiquity. Over the 1200 or so years covered by the authors discussed in this volume, that tradition produced a set of ideas and texts of enormous variety and enduring philosophical interest. There should be no need to say anything more in justification of the continued study of and interest in these ancient philosophers.

The essays gathered here cover the major thinkers and philosophical schools of the ancient Greek and Roman worlds from the end of the sixth century BC to around the sixth century AD. They are intended to offer an introduction to the ideas, arguments, and debates that are to be found in the texts of these philosophers and also an introduction to the various challenges, disagreements, and delights to be found when we now come to study and think about these ancient philosophers.

There are two characteristics of ancient philosophy and the study of ancient philosophy that we would like to highlight at the outset. First of all, the study of ancient philosophy centers on the study of ancient texts. Anyone interested in engaging with and evaluating the philosophy of this period must spend time engaging with the texts we have from the ancient world. This brings with it a number of important challenges, not the least of which are the general problems that face any engagement with texts written in an ancient language. Nuances of meaning and translation need to be recognized and appreciated. It is also important to recognize that most of the texts have come down to us via a process of copying and transmission that may have introduced a number of intervening layers of interpretation and corruption in the period between antiquity and the modern day.

What is more, besides these generic problems of textual transmission and understanding, many ancient philosophical texts offer additional challenges because of the particular and peculiar form in which they are written. Only some of them are in the form of direct treatises that set out and argue clearly for a particular philosophical view and even those that most obviously seem to fit this pattern—for example, Aristotle's works—are often carefully crafted dialectical works that require careful interpretation (see Pakaluk, this volume). Alongside these there are philosophical works in the form of dialogues (for example, by Plato and Cicero), letters, biographies, commentaries, and poems (for example, by Parmenides and Lucretius) where the literary form is an

important factor to be taken into consideration when engaging with the philosophical content. Perhaps more challenging still, many ancient philosophical works have simply not survived intact from antiquity at all. In the case of this last group, we are faced with the task of attempting to reconstruct lost philosophical positions and arguments through piecing together 'fragments'—sometimes literally the fragments of papyrus texts or else scraps of quotations in later texts—and the careful evaluation of secondary evidence. This secondary evidence, for the most part, comes in the form of reports by other ancient authors many of whom have their own philosophical agenda and cannot always be relied upon for a direct and unbiased appraisal of their predecessors and rivals. So the student of ancient philosophy has to be a careful reader and interpreter of all these different kinds of texts and has to become skilled in extracting from the evidence we have—in all its complexity and subtlety—the philosophical ideas and arguments of the time.

It would be wrong to think that this process of excavation and interpretation is always a mere preliminary to later philosophical evaluation. Often, the argument of the text is itself reconstructed in part on the basis of what would seem to be the most likely or even the most plausible philosophical position for the author to hold (a practice that is often connected with the 'Principle of Charity'). In practice, therefore, ancient philosophical texts are best approached with a combination of linguistic, literary, historical, and philosophical approaches so that the widest possible range of interpretative skills are brought to bear.

The second important characteristic is the fact that ancient philosophical texts are often best read as part of an ongoing tradition of engagement and interpretation. By this we mean that the ancient texts themselves are generally well aware of their philosophical predecessors and contemporaries. This awareness can take a wide variety of forms, ranging from the treatment of some earlier work or thinker as a foundational authority whose words deserve the utmost respect and honor to an attitude of explicit polemical hostility. In short, ancient philosophers were very conscious of the tradition of philosophy of which they were a part. Examples of this awareness include not only the development of philosophical schools from the end of the classical period onwards and the various revivals of, for example, Platonism or the later tradition of commentaries on Platonic and Aristotelian works but also various other forms of philosophical allegiance and dispute. For example, even in the earlier period of ancient philosophy it seems plausible to think that Empedocles and Anaxagoras were writing their works in some kind of reaction to their predecessors. Plato's work is a close engagement with the ideas of Socrates and also of the various 'Presocratic' philosophers. Aristotle in turn is constantly dealing with Plato and other predecessors and uses them to explain and explore his own views. The close communities of the classical city-state were excellent breeding grounds for skillful dialectic and debate between partisans of differing philosophical positions. No doubt, these discussions often took the form of face-to-face encounters but, when the philosophical world became even more dispersed, this discussion moved more and more into the papyrus scrolls and pages of texts that were then circulated, read, discussed, and interpreted. The sense of the story of ancient philosophy as a self-aware and ongoing tradition of inquiry and debate is something we hope emerges clearly from these chapters. Certainly, it is worth remarking how the philosophers treated in some of the very first chapters—the Milesians, Heraclitus, Parmenides and the like—are known to us to a large extent through the discussions and quotations of their works by the philosophers treated in the very last chapters—the commentators

on Aristotle and some of the Christian writers. Much of the ancient philosophy that we read now is engaged in a conversation with its own past; they read and were interested in understanding and disagreeing with their philosophical predecessors. That conversation is ongoing; our re-reading and engagement with those same texts and the problems they raise is another chapter in that story.

As we have already said, the chapters in this volume are intended to offer both an introduction to the philosophers from the period of, roughly speaking, the sixth century BC to around the sixth century AD and also to the practice of reading, thinking about, and engaging with those philosophers. As is to be expected from any such topic and any such enterprise, there are a number of controversies and significant matters of disagreement between modern commentators. We have made no effort to try to disguise or smooth out those disagreements. For example, it is generally agreed that understanding the philosophy of Parmenides is crucial for the understanding of early Greek philosophy. The interpretation of Parmenides' verses is, however, extremely controversial. Readers will find in this volume various different approaches to his poem and therefore to its role and influence on later philosophy (see the chapters by Palmer, Makin, and Sisko). Another example is the understanding of Aristotle's conception of human happiness (*eudaimonia*). There is a long-standing debate over whether Aristotle conceives of human happiness as constituted by a single goal and aim (*telos*) or whether he has a more inclusive conception that recognizes a plurality of goods as constituting an overall good life. Readers will find that debate reflected in different ways by the contributions by Scott and Hatzistavrou. These differences provide a sense of how open and lively many of the key debates in ancient philosophy remain. It is hoped that this volume may entice the reader to enter further into some of those debates.

Further reading

Anyone interested in the academic study of ancient philosophy and the nature of the study of the history of philosophy in general might find useful some of the following discussions.

Annas, J. (2004) 'Ancient philosophy for the twentieth century', in B. Leiter (ed.) *The Future for Philosophy*, Oxford: Oxford University Press: 25–43.

Aubenque, P. (1992) "L'histoire de la philosophie, est–elle ou non philosophique? Oui et non", in B. Cassin (ed.) *Nos grecs et leurs modernes*, Paris: Seuil: 17–36.

Burkert, W., Gemelli Marciano, L., Matelli, E. and Orelli, L. (eds.) (1998) *Fragmentsammlungen philosophischer Texte der Antike/Le raccolte dei frammenti di filosofi antichi*, Göttingen: Vandenhoeck and Ruprecht.

Barnes, J. (2002) "La philosophie entre guillemets", in M. Canto and P. Pellegrin (eds.) *Le style de la pensée: recueil de textes en hommage à J. Brunschwig*, Paris: Les Belles Lettres: 522–47; English version, "Philosophy within quotation marks?", in J. Barnes (2011) *Method and Metaphysics: Essays in Ancient Philosophy I*, Oxford: Oxford University Press: 23–42.

Barnes, J. (2006) "Bagpipe Music", *Topoi* 25: 17–20.

Brunschwig, J. (1992) "L'histoire de la philosophie, est–elle ou non philosophique? Non et oui", in B. Cassin (ed.) *Nos grecs et leurs modernes*, Paris: Seuil: 37–96.

Frede, M. (1987) "Introduction: The study of ancient philosophy", in M. Frede, *Essays in Ancient Philosophy*, Oxford: Oxford University Press: ix–xxvii.

Frede, M. (1992) "Doxographie, historiographie philosophique et historiographie historique de la philosophie", *Revue de métaphysique et morale* 97: 311–25.

Makin, S. (1988) "How can we find out what ancient philosophers said?", *Phronesis* 33: 121–32.

Rée, J. (1978) "Philosophy and the history of philosophy", in J. Rée, M. Ayers, and A. Westoky (eds.) *Philosophy and Its Past*, Atlantic Heights, NJ: Humanities Press: 3–39.

Rorty, R. (1984) "The historiography of philosophy: four genres", in R. Rorty, J. Schneewind, and Q. Skinner (eds.) *Philosophy in History*, Cambridge: Cambridge University Press: 49–75.
Rosetti, L. (ed.) (2004) *Greek Philosophy in the New Millennium: Studies in honour of Thomas M. Robinson*, Sankt Augustin: Academia Verlag.
Taylor, C. (1994) "Philosophy and its history", in R. Rorty, J. Schneewind, and Q. Skinner (eds.) *Philosophy in History*, Cambridge: Cambridge University Press: 17–30.

Part I

BEFORE PLATO

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1
THE WORLD OF EARLY GREEK PHILOSOPHY

John Palmer

The first Greek prose work of which anything survives was written during the sixth century BC by Anaximander, a philosopher from the Ionian city of Miletus. His ambition was nothing less than to explain the origins of the heavens and earth as well as the more important aspects of their structure, population, and operation. Anaximander held that our world grew out of "the Boundless" after an initial separation of certain opposites, including heat and cold, fundamental to the generation of the world's more complex entities. All these come from and eventually dissolve back into these opposites, he wrote, "according to necessity, for these things make amends and recompense to one another for their injustice according to the order of time." The later stages of his cosmogony are reported to have involved the formation of a sphere of flame encompassing the air around the earth like bark around a tree and subsequently broken off and restricted to certain circles to form the sun, moon, and stars. He also provided a model of the heavenly bodies and their relations that served as a basis for explaining such celestial phenomena as eclipses and the lunar phases. He considered the orbits of the sun and the moon to be, respectively, twenty-seven and eighteen times the earth's size, thus giving his celestial theory a rudimentary mathematical basis. The earth itself he said was shaped like the drum of an architectural column. He regarded it as maintaining its position at the center of the cosmos because there is no reason for it to move in one direction rather than another and because it obviously cannot move in different directions at once. He also gave a remarkable account of the origins of living creatures from a primordial ooze, and of human beings from a period of embryonic gestation in fish-like creatures.

Anaximander's book established the framework not only for the cosmological theorizing of his Presocratic and later Greek successors but for scientific cosmology ever since. Even in this condensed overview, many of the most striking features of his achievement are apparent: the explanation of natural phenomena in naturalistic terms, the ambition of developing a global theory able to account for a comprehensive range of apparently disparate phenomena, the positing of certain basic material principles as underlying these phenomena along with certain principles of regularity governing their interactions, a mathematical model of the heavens, and, crucially, the justification of the theory's claims on rational grounds rather than on any appeal to the authority of religious tradition.

Sir Karl Popper, in his 1958 Presidential Address to the Aristotelian Society, famously appealed to Anaximander's conjecture regarding the earth's suspensionless immobility

in articulating his own rationalist view that science makes progress via the critical examination of boldly intuitive conjectures. Anaximander's older contemporary, Thales of Miletus, reportedly held that the earth is immobile because it floats like a log on water (Arist. *Cael.* 2.13, 294a28–31). Aristotle would criticize Thales' account for merely pushing the *explanandum* back a step and leaving unanswered the obvious question of what supports the water supporting the earth. Likewise, Popper proposed, Anaximander must have arrived at his own explanation, not by any empirical observation, but by pure speculative reasoning inspired by a critical reaction to the evident inadequacy of Thales' explanation. Thus Popper claimed that what he regarded as the essential dynamic of scientific progress—that of successive conjecture, critical refutation, and new conjecture—can already be observed in this particular interaction between the very earliest philosopher-scientists. Popper also argued that the same dynamic, of successive conjecture and refutation leading to new conjecture, informs the broader development of Presocratic physical theory. He proposed that early Greek cosmology was unified by its focus on the central problem of how to theorize the phenomenon of change, and that successive attempts to do so proceeded toward a culmination in the atomistic theory that would ultimately survive until the beginning of the twentieth century.

The notion that the "problem of change" was the central preoccupation driving the development of early Greek philosophy would ground a widely accepted picture regarding the period's philosophical development. On this view, the Milesian school of philosopher-scientists comprising Thales, Anaximander, and Anaximenes held that the world developed from a primal monistic source that even now continues to function as the underlying substance of all things. This one stuff came to manifest itself in different forms due to its own essential animation rather than to any external principle or cause. None of the next generation of Ionian philosophers—Pythagoras, Xenophanes, and Heraclitus—fits easily into this story of the Presocratics' engagement with the problem of change, and each has thus been regarded as idiosyncratic in one way or another. Pythagoras and his followers in the Greek colonies of southern Italy have been viewed as more a religious sect than a philosophical school. Xenophanes has been regarded as primarily a religious poet because of his powerful criticisms of anthropomorphic conceptions of the divine. The enigmatic Heraclitus has been seen as positing fire less for its suitability as the monistic material principle of things, than because its essentially dynamic nature made it a suitable vehicle of the divine *Logos* that maintains unity in diversity and thereby governs all things. Nonetheless, since Heraclitus regarded everything as subject to ceaseless flux and change, he has been cast as standing in polar opposition to Parmenides of Elea, whose metaphysics of absolute changelessness is regarded as having prompted a major crisis in the development of early Greek natural philosophy. Parmenides is supposed to have developed a radical form of monism via a critical *reductio* of Milesian material monism. According to the widely endorsed interpretation that figures in this narrative, he argued that what exists is a strict unity free from any sort of differentiation or change and, consequently, that the world as we perceive it is altogether unreal. Parmenides' impact on subsequent developments has been understood as mediated by two staunch defenders of his radical monism in the generation to follow: Zeno of Elea, whose paradoxes likewise problematized change and plurality, and Melissus of Samos, who developed the radical metaphysics of strict monism along lines of his own.

Despite some uncertainty regarding their dating and thus regarding the relation of their activity to that of Zeno and Melissus, the major Presocratic cosmologists of the

fifth century—Empedocles, Anaxagoras, and the early atomists, Leucippus and Democritus—have all been understood as positing a plurality of material principles, in an effort to account for change in such a way as to rescue the threatened project of natural philosophy from the apparently devastating results of Parmenides' critique of earlier systems. Since Parmenides had supposedly demonstrated the impossibility of deriving plurality from unity, these "post-Parmenidean pluralists" attempt to save the phenomena, and the enterprise of cosmology, by positing a plurality of physical principles or elements, each of which replicates the attributes of his monistic reality. Accepting supposedly Eleatic strictures against generation and destruction, these thinkers reconceived these processes in terms of mixture and separation. Empedocles and Anaxagoras are also credited with introducing distinct moving causes, which had become necessary in light of Parmenides' challenge to the Milesian conception of the single substrate as containing a moving cause within itself. Presocratic natural philosophy culminates in the atomist theory developed by Leucippus and Democritus, which is regarded as the most successful attempt to provide a theoretical basis for understanding the world's changing phenomena while obeying at the level of the material principles the Eleatic strictures regarding mutability and division. Having posited a limitless number of indivisible bodies, each of which replicates the attributes of Eleatic being, it only remained for them to posit the existence of void interspersed among these atoms to secure both plurality and motion.

Such is the overarching narrative employed by many twentieth century historians of Greek philosophy in their accounts of its early period. However, this narrative's depiction of early Greek philosophy is problematic in fundamental respects. Not only does it rely on Aristotle for a validation and authorization that he does not in fact provide, but it also presumes that the problems Aristotle approached by considering the views of his Presocratic predecessors were in fact the defining problems of early Greek philosophy.

The historian of early Greek philosophy should never lose sight of the enormous difficulty of achieving an accurate view of the period's philosophical development, given the conspicuous fact that none of the Presocratics' writings survive intact. The fraction of their works we do possess has survived only because later authors in antiquity had some reason to quote from these early authors in their own writings. (The exceptions, where portions of the direct tradition of transmission survive on scraps of papyrus, can be counted on one hand.) The historical reconstruction of early Greek philosophy is therefore based on a sort of textual archaeology. In the first place, the remains of the Presocratics' lost works buried in the extant writings of later authors from the fifth century BC to the sixth century AD (and beyond) have been identified and extracted as "fragments" of the lost originals (labeled "B" texts in Diels and Kranz's standard edition). Fortunately, reconstruction of the early Greek philosophers' thought is not based solely on these fragments. There are also indirect "testimonia" in the paraphrases, discussions, or other representations of their views in the works of later authors (labeled "A" texts in Diels and Kranz's standard edition). Regardless of whether one is dealing with fragments or testimonia, one must not lose sight of the fact that we have this evidence only because some later philosopher or writer found it useful for his own purposes to record it in his own work. It will often be important to understand the use being made of the earlier figure by the later one, so as to determine in what ways that use conditions the evidence of the quotation.

It is also important to bear in mind that Aristotle is responsible, either directly or indirectly, for the survival of the larger part of the extant evidence. The later tradition affords

us significantly more information about the early philosophers who most interested Aristotle than about other apparently significant figures. Archelaus of Athens, for instance, though reportedly a pupil of Anaxagoras, who instructed Socrates and Euripides in natural philosophy, is never mentioned by Aristotle and is for us little more than a name and some rumors. Aristotle's treatises contain numerous quotations from the early Greek philosophers and even more discussions of their views, most often in surveys of earlier opinions on questions with which he was especially concerned. Two works in particular, *Physics* 1 and *Metaphysics* A, are so filled with reports of Presocratic views that they could easily be mistaken for historical surveys of Presocratic philosophy. There are also extensive discussions of the Presocratics in many other treatises, most notably *On the Heavens* (*De Caelo*), *On Generation and Corruption*, and *On the Soul* (*De Anima*). Aristotle's pupil, Theophrastus, systematically assembled, as a propaedeutic to further inquiry, the views of earlier thinkers, including the Presocratics, in his *Tenets in Natural Philosophy* and *On the Senses*. The influence of these Theophrastean works on the later historiographic tradition was profound and long-lasting, even if it has sometimes been overstated. In later antiquity, moreover, commentators on Aristotle's treatises often included further quotations and paraphrases to illustrate or support points made in their own exposition of Aristotle's discussions of his predecessors. Of particular importance are Simplicius' commentaries on Aristotle's *Physics* and *On the Heavens*. If one counts both his direct and indirect influence, then, Aristotle's concerns prove to be the most significant determinant of what has survived from the earliest period of Greek philosophy. Of course, Plato also had his influence on this transmission and the influence of Presocratic philosophy, especially in its Italian strains, runs deeper in Plato's philosophy than in Aristotle's. Nevertheless, Aristotle's more systematic approach and his commitment to the utility of reviewing earlier attempts to address the philosophical problems with which he was concerned were more crucial to the development of ancient philosophical historiography.

In modern times, moreover, Aristotle's surveys of earlier opinions in *Physics* 1 and *Metaphysics* A have continued to influence histories of early Greek philosophy in profound ways, despite the fact that his discussions of his predecessors are never purely historical. Harold Cherniss' landmark study, *Aristotle's Criticism of Presocratic Philosophy*, demonstrated this point in detail as a corrective to the largely uncritical reliance on the Aristotelian evidence among historians such as Zeller. More specifically, Cherniss argued that Aristotle's perspective was so imbued with Platonic ideology and his own repertoire of concepts and analytical tools that he repeatedly distorted and misrepresented the views of the Presocratics so as to find in them confirmation of the truth of his own ideas. This would seem most obvious in *Metaphysics* A, in which Aristotle seeks to confirm his view that there are four main types of cause—the material, formal, efficient, and final cause—by showing that earlier thinkers progressively identified causes of just these and no other types. One lesson that should have been learned from Cherniss' study is that every effort must be made to develop an account of early Greek philosophy that does not present it as progressing teleologically towards the culminating perfection of the Aristotelian system. Other historians, however, would cling to an Aristotelian narrative. Thus W. K. C. Guthrie argued that the judgment of as fine a philosopher as Aristotle must be regarded as generally sound and thus had no qualms about making the analysis of change and the successive isolation of the material, formal, and efficient causes central concerns in the development of Presocratic philosophy.

However, Aristotle's treatment of his predecessors' views regarding the principles of change does not in fact authorize the story of a progression from Milesian material mon-

ism, via the Eleatic *reductio* and rejection of all change, to the subsequent pluralistic systems of Empedocles, Anaxagoras, and the early atomists. In the first place, Aristotle does not treat the Milesian Anaximander as a material monist. In *Physics* 1 Aristotle undertakes a preliminary review of what he takes to have been the relevant views of his Presocratic predecessors regarding the principles of natural philosophy. This review begins with a classification of possible positions:

> It is necessary that the principle be either single or plural, and if single, either not subject to change, as Parmenides and Melissus say, or changing, just as the natural philosophers say, some declaring the primary principle to be air, and some, water. But if plural, they must be either limited or unlimited in number, and if limited but more than one, they must be either two or three or four or some other number, and if unlimited, they must be so either as Democritus holds, one in kind but differing in shape, or differing or even opposite in form.
>
> (Arist. *Ph.* 1.2, 184b15–22)

He then notes that his classification of principles (*archai*, sing. *archē*) proceeds along the same lines as earlier classifications of views regarding fundamental entities (*onta*):

> Those who inquire into the number of fundamental entities (*ta onta*) conduct a similar inquiry: for they investigate whether the primary entities from which [other] entities are [constituted] are one or many, and if many, whether they are limited or unlimited in number, such that they are investigating whether the first principle or element is one or many.
>
> (Arist. *Ph.* 1.2, 184b22–5)

Aristotle thus indicates that his own classificatory schema is rooted in another that stands at the very beginning of ancient Greek philosophical historiography: the schema employed by Gorgias of Leontini in his sophistic *tour de force*, "On nature," or "On what is not." Gorgias there based his argument that "nothing is," in the fundamental manner of the supposedly real nature of things as variously identified among the earlier natural philosophers, upon a classification of their views in terms of the same sort of criteria deployed by Aristotle:

> And to show that it is not, he [sc. Gorgias] collects what has been said by others who spoke of fundamental entities [*peri tōn ontōn*] and made, so it appears, statements in contradiction of one another—some demonstrating that these entities are one and not many, others that they are many and not one, and some that they are ungenerated, others that they are generated—and he draws conclusions against each party.
>
> (Arist. [MXG] 979a13–18)

Aristotle does not locate Anaximander among those who regarded the principle as one and mutable. He will instead group Anaximander with Empedocles and Anaxagoras as generating from an initial unity a plurality of opposites that function as material principles, and he will actually *contrast* these thinkers with those who posit a single material substrate and regard all other things as modifications of it (*Ph.* 1.4, 187a12–23).

Aristotle, in short, did not regard Anaximander as a material monist. It seems clear enough that the later tradition nevertheless came to regard him as such because of reports that the Boundless was for him the *archē* of all things. This term meaning "beginning," "source," or "origin" comes to have the technical philosophical sense of "principle" and to be treated as synonymous with "element," as in the passage in Simplicius' *Physics* commentary where he tries to find a place for Anaximander in Aristotle's classification of *archai*:

> Of those holding that [the *archē*] is single and changing and unlimited, Anaximander of Miletus … said that the principle (*archē*) and element of things is the Boundless, having first introduced this term for the principle (*archē*). He says it is neither water nor any other of the so-called elements, but some other, unlimited nature, from which come to be all the heavens and the world-systems within them. Those things from which entities have their generation, their destruction also occurs into these things "according to necessity, for these things make amends and recompense to one another for their injustice according to the order of time", as he speaks of them in these rather poetic terms.
>
> (Simpl. *in Phys*. 24.13–21 Diels; DK 12 A9)

Simplicius did not possess a copy of Anaximander's book. Instead, he was relying for his information on Theophrastus' *Tenets in Natural Philosophy*, which he would have known only indirectly. While Anaximander regarded the Boundless as the *archē* of things in the sense of being their original source, as Thales had regarded water, neither he nor Thales apparently would have regarded the original source as the persisting substrate of things.

The common reports in the doxography that Anaximander identified the Boundless as the *archē* obscured this distinction. Thus Cicero drew on a doxography compiled within the skeptical Academy, which in turn drew upon Theophrastus, to report that Anaximander "said that there was an indeterminate nature from which everything came to be" (*Acad*. 2.118, trans. Brittain). A century or so thereafter, the doxographer Aëtius, in his exhaustive compendium of views on topics in natural philosophy, reported in his chapter on *archai* that Anaximander "says the principle (*archē*) of things is the Boundless, for from this all things come to be and into this all things perish" (Aët. 1.3.3). Still later, Diogenes Laërtius reports in his *Lives and Opinions of the Eminent Philosophers* that "Anaximander … declared the principle (*archē*) and element (*stoicheion*) to be the unlimited, without distinguishing it as air or water or any other thing" (Diog. Laert. 2.1). Around the same time, Hippolytus of Rome, in his *Refutation of All Heresies*, reported that "Anaximander … said the principle (*archē*) of things is of the nature of the unlimited, from which the heavens and the cosmos within them originates. … He spoke of the principle (*archē*) and element (*stoicheion*) of things as the unlimited, being the first to employ this name for the principle" (Hippol. *Haer*. 1.6.1–2). Fortunately, in the latter part of the Theophrastan report employed by Simplicius, which includes Anaximander's extant fragment, one can still discern that he explained the generation of things other than the opposites in terms of their interaction, as Aristotle indicates in *Physics* 1.4 by classing him with Empedocles and Anaxagoras.

The representation of Anaximander as a material monist is just one of numerous instances where one must be careful about relying on the testimonia of an ancient historiographic tradition, which both ultimately derives from Aristotle and yet, in its

drastically simplified representation of the early Greek philosophers' views, runs counter to Aristotle's own more nuanced treatment. It is also, of course, a representation that has figured prominently in histories of Presocratic philosophy structured around the problem of change. For another important instance of how Aristotle's evidence is more complex than it is taken to be in the narrative it is taken to authorize, consider how Parmenides and Melissus figure in *Physics* 1.2's classification of views regarding the first principles in natural philosophy. Aristotle inherits from Gorgias' classification the representation of their view as: what is (*to on*) is one and unchanging. The attribution of this thesis jointly to Parmenides and Melissus then recurs, for instance, in Aëtius' report in his chapter on generation and destruction: "Parmenides and Melissus did away with generation and perishing because they believed the universe to be unchanging" (Aët. 1.24.1). Here in *Physics* 1, however, Aristotle almost immediately starts to correct the Gorgianic assimilation of Parmenides and Melissus within his own adapted classification of principles. First he has to explain that it does not properly belong to natural philosophy to consider whether what really is (*to on*) is one and unchanging, because such an entity could not serve as a first principle in natural philosophy (*Ph.* 1.2, 184b25–185a5). As he proceeds to clarify this point, Aristotle starts to distinguish between the strict monism of Melissus, who really did argue that only one thing exists and that it is totally undifferentiated and unchanging (a view Aristotle rightly regards as merely provocative and unworthy of serious attention), and the more philosophically serious monism of Parmenides, a view he represents as a form of substance monism ultimately compatible with the existence of other things. When he comes again to consider Parmenides and Melissus, now alongside Xenophanes, during the course of his inquiry in *Metaphysics* A, there too Aristotle distinguishes them by saying that, in regarding the universe as being of a single nature, Parmenides' conception was of a formal unity, while Melissus' was of a material unity (Arist. *Metaph.* A.5, 986b10–12, 18–20). After again dismissing Melissus as too crude to be regarded seriously, Aristotle briefly explains the reasoning he supposes led Parmenides to his particular monistic stance; he then adds that Parmenides posited two principles as the basis for his cosmology since he supposed that what really is (*to on*) is formally one but plural vis-à-vis perception (986b27–34).

Aristotle does not suppose the provocatively paradoxical strict monism of Melissus should not be fathered onto the more philosophically serious Parmenides. On the contrary, Aristotle regards Parmenides' monism as compatible with the existence of the multiple and mutable entities commonly recognized as populating the world—as well he might, given that Parmenides devoted most of his philosophical poem to explaining the principles, origins, and operations of the cosmos along broadly traditional lines, though with a number of important innovations. The tradition reports, for instance, that he was the first to declare that the earth is round and to recognize the identity of the morning star and the evening star. Melissus' treatise, on the other hand, contained no cosmology, an absence consistent with his strict monism's entailment that none of the objects of our ordinary experience even exist. That Parmenides developed a detailed and brilliant cosmology of his own is a difficult fact to accommodate within the narrative that makes his purported challenge to the nascent tradition of Greek cosmology its central feature. This outstanding difficulty is symptomatic of a broader problem in the current understanding of early Greek philosophy. Although Parmenides is commonly regarded as the period's most profound thinker and as the pivotal figure in its development, there is persistent and substantial disagreement regarding Parmenides' metaphysical doctrines and consequently regarding how he figures in the history of the period.

One class of Parmenidean interpretations (represented in this volume by Steve Makin's treatment of Parmenides) follows the lead of G. E. L. Owen's seminal "Eleatic questions" in supposing that purely logical considerations drove him to advocate a strict monism that entails the unreality of phenomena. These interpretations ascribe to Parmenides a concern with logical problems arising from negative existential statements that loomed large in early analytic philosophy. They also face difficulties in explaining satisfactorily why Parmenides should have taken pains to explain in a cosmology of his own the workings of a world his arguments are supposed to have ruled out of existence.

Another class of interpretations follows the lead of Alexander Mourelatos in viewing Parmenides not as propounding a deliberately paradoxical monism designed as a fundamental challenge to the incipient tradition of natural philosophy, but as providing a more positive stimulus by specifying at an abstract level in the major metaphysical portion of his poem what the principles of any adequate physical system would have to be like. On this view, Parmenides is not to be regarded as a monist in any straightforward way. Instead, his argument that what is must be eternal, whole, uniform, unchanging, and complete is meant to be programmatic and to put cosmology on a new and more secure footing. The post-Parmenidean physical systems of Empedocles, Anaxagoras, and the early atomists are consequently regarded, on this view, as carrying through in various ways on Parmenides' positive agenda for natural philosophy. The major problem with interpretations of this class is that the principles of Parmenides' own cosmology do not actually conform to what is taken to be his programmatic specification of what the principles of a viable cosmology would have to be like.

Even if Aristotle's view of Parmenides' monism is colored by his own analytical framework, nonetheless Aristotle better understands Parmenides' achievement as both metaphysician and cosmologist than a good many modern historians. This is largely because Aristotle appreciated that the claims Parmenides develops in the first major part of his poem have little or nothing to do with natural philosophy, whether critically or programmatically, but belong fully and properly to metaphysics. Echoing his general dismissal of Parmenides and Melissus from the inquiry in *Physics* 1 on the grounds that they propounded theses irrelevant to the inquiry into the natural philosophical principles, in *Metaphysics* A.5 Aristotle dismisses Parmenides along with Xenophanes and Melissus on the grounds "they do not, as do some of those who inquire into nature, propound the thesis, 'what is is one,' while providing for generation from this one as from matter, but they speak in a different manner; for the others attribute change [to their principle] in providing for the generation of the universe, but these say that it is unchanging" (*Metaph.* A.5, 986b14–18). Aristotle indicates more clearly the inquiry to which examination of the Eleatic thesis would properly belong in *De Caelo* 3.1, saying there that the Eleatic view that certain things are not subject to generation and change belongs "to another inquiry prior to the inquiry into nature" (*Cael.* 3.1 298b19–21). This higher inquiry is theology or first philosophy, that is, the theoretical science that takes as its domain entities not subject to change and capable of independent existence. Aristotle regards Parmenides' derivation of the attributes of "what is and cannot not be" as not germane to natural philosophy.

Parmenides describes the critical choice he made in his efforts to achieve stable understanding. He had to focus his thought either on "what is and cannot not be" or on "what is not and must not be." Since there is nothing about the latter to be apprehended, he is properly directed to focus his attention on the former. His guiding question then becomes: what must "what is and cannot not be"—or, more simply, "what must be"—in

fact be like simply in virtue of its mode of being? The attributes Parmenides reasons must belong to "what must be" are systematically related in a way that suggests he means them to exhaust the logical possibilities: "what must be" both must be (or exist), and it must be what it is, not only temporally but also spatially. For "what must be" to be (or exist) across times is for it to be ungenerated and deathless. For it to be what it is across times is for it to be "still" or unchanging. For "what must be" to be (or exist) throughout space is for it to be "whole"; and for it to be what it is wherever it is internally is for it to be "uniform." Finally, for "what must be" to be what it is everywhere at its extremity is for it to be "perfect" or "complete." Taken together, the attributes shown to belong to "what must be" amount to a set of perfections: everlasting existence, immutability, the internal invariances of wholeness and uniformity, and the invariance at its extremity of being optimally shaped. "What must be" thus proves to be not only a necessary but, in many ways, a perfect entity. The evidence of the poem suggests that this entity has no evident relation with the natural world. It thus plays no role in Parmenides' cosmology. To understand Parmenides' role in the development of early Greek cosmology, one must look to what can still be reconstructed of his own cosmology. Parmenides' conception of "what is and cannot not be" belongs, as Aristotle properly recognized, to the higher domain of first philosophy or theology.

It is important to realize, more generally, that Aristotle hardly authorizes a view of the Presocratics as exclusively concerned with natural philosophy, despite the fact that his treatment of these figures in his natural philosophical treatises would prove to have a decisive influence on the surviving evidence for their thought. One cannot safely presume that the problems Aristotle undertook to resolve, by reviewing what he took to be relevant views among the early Greek philosophers, were in any way the period's defining problems. It is clearly anachronistic to tell the history of Presocratic philosophy in terms of the progressive isolation of the Aristotelian causes. It is just as anachronistic, though perhaps less obviously so, to tell this history as if the early Greek philosophers were intent upon developing a general analysis of change. As difficult as it may be to free ourselves from the Aristotelian influence that permeates our evidence, we nevertheless have to ask how the early Greek philosophers envisioned their own projects and aims. If we wish our history of the period to have an overarching narrative, then we must characterize their projects and aims in broad enough terms that we neither improperly marginalize the achievements of certain figures nor misrepresent the characteristic range of the early Greek philosophers' concerns.

The beginnings of philosophical ambition during this period involved the desire to achieve via rational inquiry a deeper understanding of the nature and workings of the world and thereby of our own place in it. Common among the early Greek philosophers was a perspective on the conditions of the world's intelligibility that is well reflected in the famous description in Plato's *Phaedo* of Socrates' excitement upon hearing someone read from the book of Anaxagoras. What he heard led him to envision an essentially teleological mode of understanding:

> One day, however, I heard someone reading from a book he said was by Anaxagoras, according to which it is, in fact, Intelligence (*Nous*) that orders and is the reason for everything. Now this was a reason that pleased me; it seemed to me, somehow, to be a good thing that Intelligence should be the reason for everything. And I thought that, if that's the case, then Intelligence in ordering all things must order them and dispose each individual thing in the best way

> possible; so if anyone wanted to find out the reason why each thing comes to be or perishes or is as it is, this is what he must find out about: how is it best for that thing to be, or to act or be acted upon in whatever way?
>
> (*Phd.* 97b8–d1, after Gallop)

Although Socrates is made to report his disappointment with the rest of what he heard from Anaxagoras, Plato here isolates certain assumptions that are fundamental not merely to Anaxagoras' but to almost all the early Greek philosophers' understanding of the world's intelligibility. Just as human behaviors are explicable primarily because they are the intentional products of directive intelligences, so Anaxagoras is represented as regarding events in the broader natural world as explicable and intelligible ultimately because they reflect the activity of a divine Intelligence ordering and disposing all things. The parallel between the rational governance of events at the microcosmic level of human action and the rational governance intuited at the macrocosmic level makes the world's workings potentially intelligible. More precisely, what is required for the world to be intelligible is that it should operate according to fundamental principles of order—something meant to be guaranteed by its governance by an ordering intellect—and that these principles of order can be apprehended by humans. Most of the Presocratic systems assume a close link between the natural world's intelligibility and the operation of a divine intelligence at the macrocosmic level that is relevantly similar to the microcosmic operation of intelligence in our own and other human persons. The obvious exception is the system of the early atomists. Otherwise, there is a strong theological dimension to much of the ostensibly naturalistic or scientific theorizing of the early Greek cosmologists.

Although it functioned as the ultimate source of the opposites that interact to form our cosmos, Anaximander's Boundless was also a divine entity capable of somehow governing this cosmos's generation and subsequent operations. Aristotle implies as much in a key passage that not only confirms that he understood Anaximander's Boundless to be the source, though not the substrate, of all other things but also emphasizes in unmistakable terms its essential divinity:

> [The Boundless] has no origin (*archē*), but it is thought to be the origin of other things and to embrace all things and to govern all things, as those say who do not posit other [moving] causes besides the Boundless, such as Mind or Love. This, indeed, is the divine. For it is deathless and unperishing, just as Anaximander says along with most of the natural philosophers.
>
> (*Ph.* 3.4, 203b10–15; cf. 3.6, 207a18–20, 3.7, 208a2–4)

The paratactic style and formulaic character of the phrases Aristotle here employs in describing the divine nature and governing function of the Boundless likely echo or even reproduce Anaximander's own words. Although one should perhaps not expect that Anaximander described the Boundless's governing activity in terms more clear or precise than Aristotle here intimates, still it is plausible that this activity was meant to guarantee the justice and equilibrium in the interactions of opposites described in the principal fragment of his book. Like Anaximander's Boundless, the primordial *aēr* of his Milesian successor, Anaximenes, was no inert elemental stuff but an all-embracing divine force likewise governing the cosmos. Both Aëtius and Cicero report that Anaximenes conceived of *aēr* as a god (Aët. 1.7.13; Cic. *Nat. D.* 1.26). Aëtius also

attributes to Anaximenes a striking analogy between microcosm and macrocosm: "As our soul, being *aēr*, holds us together, so *pneuma* and *aēr* embrace the whole cosmos" (Aët. 1.3.4 Diels). Anaximenes thus appears to have anticipated the condition of the natural world's intelligibility that Plato's Socrates found in Anaxagoras.

Xenophanes, Pythagoras, and Heraclitus each develops in his own way a more refined conception of the world's ordering principles. Xenophanes does so by way of a critique of the anthropomorphic conception of the divine guarantors of order in the Homeric and Hesiodic epics. Despite this critical approach, the way Xenophanes' god effortlessly shakes all things (DK 21 B25) recalls not only Hesiod's description of Zeus' effortless action from his heavenly abode (Hes. *Op.* 5–8) but also Homer's description of how Zeus makes Olympus tremble simply by nodding his head (Hom. *Il.* 1.528–30). Xenophanes seems to have arrived at his conception of the one greatest god by refining traditional representations of the heavenly ruler in accordance with certain principles regarding what befits divine magnificence. This principle of true piety grounds his criticism of Homer and Hesiod for imputing to the gods acts humans normally consider wrong (DK 21 B11, B12, cf. B1.21–4). Xenophanes likewise regards the greatest god as unmoving since "it is not befitting" for him to go to different places (B26). Xenophanes' god is "not at all like mortals in its form or in its mind" (B 23.2). More positively, he says that this god "shakes all things by the thought of its mind" (B 25) and that it "sees as a whole, thinks as a whole, and hears as a whole" (B24). Xenophanes clearly conceives of the greatest god as governing the cosmos, though his conception of how it does so seems no more precise than that of his Milesian predecessors. Xenophanes instead concentrates on what the divine principle of order must be like to fulfill this role and concludes that it must be greater and more perfect than theretofore recognized.

Pythagoras was as much a mystic and sage as a philosopher. Difficult as it is to penetrate the accretions of later Pythagoreanism to attain an historically accurate view of Pythagoras' own teaching, Aristotle's pupil Dicaearchus appears to distill the heart of his teaching in reporting that it was generally known that he held that the soul is immortal, that it transmutes into other kinds of creature, that things happen in recurring cycles, so that nothing is ever absolutely new, and that all animate beings ought to be regarded as related (Dicaearchus fr. 29 Wehrli in. Porph. *VP* 19). Pythagoras' transmigration doctrine certainly grounded much of his ethical and religious teaching (cf. for example, Xenophanes DK 21 B7), but this testimonium suggests that the doctrine itself was predicated on the notion that patterns of cyclical regularity are universally operative, both in the cosmos as a whole and at the microcosmic level of our own lives. Pythagoras also seems to have had, however crudely, the crucial insight that the natural world operates in accordance with mathematical principles of harmony and order. The basic harmonic ratios were represented in the *tetractys*, a triangular arrangement of the numbers 1 to 4. The Pythagoreans called the *tetractys* "the source of ever-flowing nature," according to Sextus Empiricus, because "the entire cosmos is arranged harmoniously," with harmony itself conceived as a system composed of the three musical concords of the fourth, the fifth, and the octave, which correspond to the ratios 4:3, 3:2, and 2:1 made manifest in the *tetractys* (Sext. Emp. *Math.* 7. 95). The *tetractys* thus represents the rational order of the cosmos in an ordered series of numerical ratios. While we are unlikely ever to know how elaborate a conception of these principles may reliably be ascribed to Pythagoras himself, it at least seems safe to credit him with a more profound interest than is evident among the earlier Greek philosophers in the principles of order operative in the cosmos and our astonishing abilities both to understand them and to regulate our lives according to them.

Heraclitus envisioned the natural world's underlying principle of order in a manner comparable in its sophistication to Pythagoras'. By identifying this principle with a divine governing agent, he also developed a richer conception of divine governance than is found in Xenophanes or the Milesians. Heraclitus' principle of order is *Logos* or Order itself, conceived of as the balanced and harmonious relation underlying and regulating the world's various changes. All things happen according to this *Logos* (DK 22 B1), which is "common" or universal (B2) and which stabilizes and unifies opposites even as they struggle against one another to maintain their opposition. The resulting phenomena he spoke of as "conjunctions whole and not whole, while what is brought together is brought apart, what is concordant is discordant—from all one and from one all" (B10). Although things may be most manifest to ordinary humans in their isolation and opposition, they nonetheless exist in a unifying relation that is itself divine: "god is day night, winter summer, war peace, fullness hunger: he alters in just the way fire, when mixed with spices, is named according to the scent or each one" (B67). This analogy with fire is not incidental, for Heraclitus identifies fire as the divine *Logos*' elemental manifestation and the vehicle of its active operation in all things. Heraclitus ascribes a directive capacity to fire itself, both in the cosmos generally and in human beings, whose souls he associates with fire (B118, cf. B36, B115). Like Pythagoras, Heraclitus believed his insights into the cosmos's governing principle had crucial implications for ethical, religious, and even political practices. The soul, he believed, may survive death if its essentially fire-like nature has been purified in life, and he claimed that "all human laws are fed by a single law, the divine law" (B114).

The traditional opposition between Heraclitus and Parmenides, as, respectively, the philosopher of flux and the philosopher of changelessness, rests on a reductive understanding that obscures important similarities in their broader metaphysical outlooks. Both Heraclitus and Parmenides suppose that while all the objects of immediate experience are subject to ceaseless change, differentiation, and opposition, there is nonetheless something permanent and unchanging that, though initially non-apparent, it is imperative that we apprehend. Parmenides, however, follows a more rigorous route to the unprecedented understanding he claims to have achieved. Whilst Xenophanes, and perhaps Heraclitus, had arrived at a conception of a more perfect divine governor by rejecting anthropomorphic conceptions of divinity, Parmenides asks what one can legitimately infer regarding the attributes of "what is and cannot not be" simply in virtue of its mode of being, thereby limiting his conception of the greatest entity to what can be securely known of it by reason alone. The result is an entity ungenerated and imperishable, whole, uniform, immutable, and perfect that transcends any intimate connection with the world's natural processes as either a material or governing principle. These roles are fulfilled in Parmenides' cosmology by entities wholly distinct from "what is and cannot not be," namely, by the opposites light and night and by a divine, all-governing Necessity. The natural world is therefore intelligible in terms of its own underlying principles. Parmenides' rational inquiries lead him further, however, to an apprehension of the essential attributes of a necessary and perfect entity that transcends the natural world.

Central to the deeper understanding of the world's working professed by Empedocles was the essentially Pythagorean insight regarding the operation of cyclical and reciprocal changes at both the microcosmic and macrocosmic levels. He held that nothing ever perishes absolutely, that everything is instead continuously reborn in new forms, and that everything that comes to be has some form of pre-existence. These ideas

function in Empedocles' system as fundamental principles of explanation for all manner of phenomena, from the lives of plants and animals right up to the life of the cosmos itself. At this microcosmic level, the so-called "birth" of each individual living thing, be it human, animal, or plant, in fact involves the coming together and intermingling of pre-existing entities, including the elemental constituents of all things. The same principles also apply at the macrocosmic level. Empedocles appears to have thought that the cosmos as a whole goes through a cycle of periodic changes, and that these changes constitute the cosmos's own "birth," "life," and "death." Like Parmenides, Empedocles posits a plurality of physical elements—earth, water, fire, and air—and external sources of their interaction in the divine forces of Love and Strife. Empedocles likewise conceives of the cosmos, when perfectly unified under Love, along Parmenidean lines: not only is it whole, uniform, and spherical, it may be regarded as ungenerated and imperishable as well, in that it persists during the cosmological phase (when it is broken apart into the elements by Strife) as the "divine mind" that darts throughout the cosmos with its swift thoughts in a manner reminiscent of Xenophanes' greatest god.

The Anaxagorean system, as Plato perhaps appreciated, stands as a sort of culmination of the trends that had come to define the ambitions of the Presocratic explanatory paradigm. The world is governed from its inception by the agency of an ordering Intellect, which remains separate from the rest of the physical world and possesses many of the numerous perfections ascribed to the greatest or most transcendent entities of the Presocratic systems. At the same time, Anaxagoras had to respond to the novel challenge to physical theory posed by Zeno's problematization of naïve or everyday conceptions regarding material structure. He did so by embracing the Zenonian idea that there is no least magnitude, in order to make it the basis of a physical theory far more sophisticated than any developed theretofore. Anaxagoras posited that every portion of matter contains portions of every kind of stuff, that no stuff once mixed with others can ever be totally on its own, and that the phenomenal characteristics of each thing are a function of the preponderance within it of stuffs with the relevant characters. Plato is perhaps also right to complain that the explanations of natural phenomena in Anaxagoras' cosmology made little use of Intellect, for these phenomena are more directly intelligible in terms of the general principles or laws of his physics. It is more clearly the case in the atomist systems of Leucippus and Democritus that the phenomena of the natural world are made intelligible solely in terms of a rationally derived physical system sophisticated enough to account for them on its own. The principles of order in early atomism neither require nor are given any basis in the operation of an ordering intellect. Unlike Anaxagoras, though, the early atomists presume no structural parallel between the human microcosm and the cosmos as a whole. Democritus' ethical prescriptions thus have no evident relation to the principles of his physical theory. Like the Sophists, his late fifth century contemporaries, Democritus has come to treat the realm of value independently of the natural realm.

Impressed by the conflicting accounts of the origins and operation of the world given in the myths of their own tradition and of the great Near Eastern civilizations around them, the early Greek philosophers were revolutionary in seeking naturalized rather than theocentric accounts of natural phenomena. They thus began to offer truth-evaluable *logoi* or reasons for their claims about the world's origins and operation that were available for public criticism rather than sanctified by the authority of religious tradition. These thinkers' attempts to gain access to the imperceptible causes of perceptible phenomena impressed upon them that human beings have, in addition to the basic

sensory apparatus, a faculty of *logos* or reason that provides a distinct means of access to truths about our world. Thus Parmenides, for instance, is famously urged to "judge by *logos*" claims about "what is and cannot not be" and to refrain from habitual reliance on perception. As they explored the operation of this rational capacity, the Presocratics came to view the world itself as operating on the basis of its own rational principles, responsible simultaneously for the order, regularity, and harmony apparent in its operation and also for the world's intelligibility. Many of the early Greek philosophers shared the fundamental insight that the *logos* inherent in the world itself grounds the ability of our own *logos* to understand it, and express it in accounts whose own order reflects that of the world. Some went further and began to inquire after the cause of the rational order observable in the world's operation and came to suppose that this can only be found in some universal governing *Logos* not entirely unlike our own.

References and further reading

Primary sources: The standard collection of the fragments of the early Greek philosophers' writings and of testimonia in other ancient authors regarding their activities and thought is: H. Diels and W. Kranz, *Die Fragmente der Vorsokratiker*, 6th edn. (Berlin: Weidman, 1951–2). Texts of the major fragments and select testimonia for the principal Presocratics with English translations and commentary are provided by G. S. Kirk, J. E. Raven, and M. Schofield, *The Presocratic Philosophers*, 2nd edn. (Cambridge: Cambridge University Press, 1983) and by D. Graham, *The Texts of Early Greek Philosophy*, vol. 1 (Cambridge: Cambridge University Press, 2010). R. Waterfield, *The First Philosophers: The Presocratics and Sophists* (Oxford: Oxford University Press, 2000) provides English translations and commentary without the Greek texts.

Cherniss, H. (1935) *Aristotle's Criticism of Presocratic Philosophy*, Baltimore, MD: Johns Hopkins Press.

Guthrie, W. K. C. (1957) "Aristotle as a historian of philosophy: some preliminaries," *Journal of Hellenic Studies* 77: 35–41.

—— (1962) *A History of Greek Philosophy*, vol. 1: *The Earlier Presocratics and the Pythagoreans*, Cambridge: Cambridge University Press.

—— (1965) *A History of Greek Philosophy*, vol. 2: *The Presocratic Tradition from Parmenides to Democritus*, Cambridge: Cambridge University Press.

Mourelatos, A. P. D. (1970) *The Route of Parmenides: A Study of Word, Image, and Argument in the Fragments*, New Haven, CT, and London: Yale University Press.

Owen, G. E. L. (1960) "Eleatic questions," *Classical Quarterly* 10: 84–102. Reprinted with additions in R. E. Allen and D. J. Furley (eds.) (1975) *Studies in Presocratic Philosophy*, vol. 2: *Eleatics and Pluralists*, London: Routledge & Kegan Paul, pp. 48–81.

Popper, Karl (1958/9) "Back to the Presocratics," *Proceedings of the Aristotelian Society* 59: 1–24. Rev. repr. in his (1963) *Conjectures and Refutations*, London: Routledge & Kegan Paul: 136–65.

Those wishing to explore further the main topics of this chapter should compare the historical narratives developed in the following works:

Barnes, J. (1982) *The Presocratic Philosophers*, 2nd edn. London: Routledge & Kegan Paul.

Curd, P. K. (1998) *The Legacy of Parmenides: Eleatic Monism and Later Presocratic Thought*, Princeton, NJ: Princeton University Press.

Furley, D. J. (1987) *The Greek Cosmologists*, vol. 1: *The Formation of the Atomic Theory and its Earliest Critics*, Cambridge: Cambridge University Press.

Graham, D. W. (2006) *Explaining the Cosmos: The Ionian Tradition of Scientific Philosophy*, Princeton, NJ: Princeton University Press.

Gregory, A. (2008) *Ancient Greek Cosmogony*, London: Duckworth.

Hussey, E. (1972) *The Presocratics*, London: Duckworth.

McKirahan, R. (1994) *Philosophy Before Socrates*, Indianapolis: Hackett Publishing Company.

Osborne, C. (2004) *Presocratic Philosophy: A Very Short Introduction*, Oxford: Oxford University Press.

Palmer, J. A. (2009) *Parmenides and Presocratic Philosophy*, Oxford and New York: Oxford University Press.

Warren, J. (2007) *Presocratics*, Berkeley and Los Angeles, CA: University of California Press.

On the handling of the source material for Presocratic philosophy, see:

Mansfeld, J. (1999) "Sources," in A. A. Long (ed.) (1999) *The Cambridge Companion to Early Greek Philosophy*, Cambridge: Cambridge University Press, pp. 22–44.
Osborne, C. (1987) *Rethinking Early Greek Philosophy: Hippolytus of Rome and the Presocratics*, London: Duckworth.
Palmer, J. A. (2008) "Classical representations and uses of the Presocratics," in P. Curd and D. W. Graham (eds.) (2008) *The Oxford Handbook of Presocratic Philosophy*, Oxford and New York: Oxford University Press, pp. 530–54.

Related chapters

2. The early Ionian philosophers
3. Parmenides, Zeno, and Melissus
4. Anaxagoras and Empedocles in the shadow of Elea
5. Leucippus and Democritus
6. Pythagoreans and the Derveni papyrus
22. Aristotle' philosophy of nature

2
THE EARLY IONIAN PHILOSOPHERS

Daniel W. Graham

Although in early Greece there were many sages renowned for their wisdom, eloquence, and statecraft, the tradition of philosophy, starting at least with Aristotle, has identified one select group—the Ionian thinkers—as the first philosophers. The earliest blossoming of philosophy occurred in Miletus, a leading city-state of Ionia on the central Aegean coast of Asia Minor, where Thales, Anaximander, and Anaximenes flourished. The city of Colophon slightly to the north produced Xenophanes; and Ephesus, lying between the two cities, was the home of Heraclitus. Although Xenophanes has often since antiquity been classified as belonging to the Eleatic (Italian) school and Heraclitus has regularly been left out of successions as a philosophical maverick, the five philosophers have much in common and seem to contribute to an ongoing conversation.

Thales

Already in the seventh century BC Miletus had a network of colonies and trading partners extending from the western Mediterranean to the Black Sea, and to Egypt and the Levant. As the city flourished, so did its intellectual life. One of its leading citizens is reputed to be the founder of philosophy (Aristotle *Metaphysics* A.3, 983b20–21 = DK 11 A12). Born around 624 in Miletus and living until around 545, Thales was recognized in his own lifetime as one of the Seven Sages. All of the other sages, however, were noted for maxims, poetry, or political expertise, while he was known for a scientific attitude toward the world. He did share with some of the other sages an interest in political theory and practice. In his time the kingdom of Lydia, to the east, was expanding and threatening the independence of the Greek states along the coast. Toward the end of his life, the Persian Empire went to war with Lydia and swallowed it up. Before this happened, Thales had recommended forming an Ionian union with a parliament and a capital in the central city of Teos. He also advised his fellow citizens to avoid military alliances with Lydia. When Lydia fell, only Miletus among the Greek cities was spared the fate of becoming tributary to the Persian Empire, instead making an equal alliance—apparently a reward for maintaining a neutral foreign policy.

Thales seems not to have left any written treatise, thus making a reconstruction of his thought more than usually hazardous. Even Aristotle seems to have known his ideas only at second hand, probably in a collection of doctrines made by Hippias of Elis (Snell 1944, Classen 1965, Patzer 1986, Mansfeld 1990). Thales may have taught only orally

(A19). His early fame as an intellectual innovator meant that his legend grew quickly, with many stories of accomplishments and discoveries. He was known for the doctrine that all is water: he held that the earth is like a raft floating on a vast sea, while ripples on the surface of the sea cause the phenomenon we know as earthquakes and all other elements or substances arise from water. He could have gotten the idea for his cosmology from Egyptian or Near Eastern sources. Yet even if so, he seems to have transformed it from a mythological conception into a quasi-scientific explanatory theory that emphasized natural features over the supernatural beings of myth.

He is said to have brought back geometry from Egypt and thus to have initiated Greek mathematical inquiry. What he may reasonably have done is to bring back a knowledge of practical surveying ("geometry" means "earth measurement") which the Egyptians practiced as a means of restoring boundaries after the annual Nile floods. He also apparently learned that similar triangles have proportionate sides, a fact that allows for practical applications such as measuring the height of a pyramid from the shadow of a stick or measuring the distance of a ship at sea by triangulation. Thales also said a year consisted of three-hundred and sixty-five days. This is the year established by the Egyptians and far ahead of its time in the Mediterranean world.

Thales proposed a theory of the Nile floods, which occur each year in the summer. He theorized that the "etesian" winds, northerly winds that blow in late summer, caused the waters of the Nile to back up as they flowed north into the sea. This theory indicates that Thales knew Egyptian geography and seasonal phenomena and tried to explain them.

Thales apparently learned from Phoenician sailors that the constellation Ursa Minor lies closest to the north pole of the heavens. This piece of knowledge has immediate applications for navigation and seems like a plausible borrowing. Thales also became known for much more impressive feats of astronomical knowledge. He is said to have predicted an eclipse in 585 BC, presumably the one which (according to modern science) occurred on 28 May. Accordingly, he is said to have discovered that the moon gets its light from the sun and that eclipses are caused by a blocking of the sun's light. In Thales' time Babylonian astrologers had established recurring cycles of eclipses which he could conceivably have used to make a prediction. Yet their data were good only for the area around Babylon, where the observations were made, not for western Anatolia. Furthermore, that Thales discovered the source of the moon's light and the cause of eclipses seems unlikely given that his immediate philosophical successors expounded theories of lunar light and eclipses that were wildly different from the true account and showed no appreciation of relationships it would have established.

Thales also said that the magnet acted on iron by having a soul, and "all things are full of gods" (A3, A22). He seems to have reasoned that the action of a magnet required some agency (Barnes 1982: 6–9).

When we make allowances for doubtful attributions, we find that Thales was an innovative and versatile thinker, who borrowed useful knowledge from neighboring cultures and began the tradition of theoretical inquiry into natural phenomena. His greatest legacy was probably his ability to see events as natural phenomena to be explained in terms of simple natural processes, rather than the arbitrary acts of divine beings.

Anaximander

With Thales' successor Anaximander, we are on more solid ground, for the latter wrote a book that was known to some ancient authorities (DK 12A1, A2, A7, A9). It is likely

to have been the first philosophical work committed to writing and one of the first prose treatises written in Greek (Kahn 1960: 6–7). Anaximander's most striking and influential innovation was to locate his speculations within the framework of a cosmogony, an account of how the world came to be. Ancient sources date Anaximander as about fifteen years younger than Thales and as dying at about the same time. From what we can see, Anaximander's theories were more unified and more comprehensive than his master's.

According to Anaximander, the world arose when a part of the boundless which was generative of hot and cold separated off. Earth gathered at the center of a cosmic eddy, which was surrounded by air, while a sphere of flame surrounded that. The sphere of flame eventually broke up into concentric rings of fire, each enveloped in a layer of air or mist, which rendered it invisible—except at a hole where the fire shone out. The rings constitute the orbits of the heavenly bodies, with the sun outermost, the moon in the middle and rings of stars closest to the earth. The earth is a disk in the shape of a column drum, its diameter three times its height; the sun's circle is twenty-seven times that of earth, the moon's eighteen, and the stars' circles presumably nine. The earth stays in place by a kind of equilibrium, since it is evenly distant from other bodies. Anaximander drew a map of the earth with the three known continents of Europe, Asia, and Africa surrounded by water at the rim of the earth. While the vision of the earth as a flat disk surrounded by water is consistent with Hesiod's mythical cosmography (*Theogony* 116–33), Anaximander's picture of the heavens is utterly new, as is his account of why the earth stays in place. The image of the earth as a column drum draws on the latest architectural technology: the construction of large columns by stacking disk-shaped stones on top of each other had just appeared in Ionia, imported from Egypt.

Anaximander went on to tell how the earth was originally covered with moisture, but evaporation caused the water to recede, leaving the present seas. The resulting vapors produced winds and were responsible for the "turnings" or solstices of the sun and corresponding motions of the moon. Wind also causes lightning, thunder, and other storm phenomena by breaking out of clouds with a flash and a tearing sound.

Life arose in the seas, sometimes in the form of embryo-like beings enclosed in a prickly shell. When the shell burst, animals came out on land. Human beings arose by a similar process, evidently after being nourished a long time in a shell, since children cannot feed themselves. Anaximander's biology sounds strikingly modern, incorporating an account of how life spread from sea to land. It is not quite, however, a theory of evolution, since species do not arise from different species, at least in a regular process.

Once the cosmic bodies of earth, sun, moon, and stars, and the face of the earth, part dry, part wet had emerged, it was necessary for meteorological and cosmic processes to be stabilized. Anaximander's most characteristic insight came in his explanation of the cosmic order, and our evidence for it comes from the late (fifth–sixth century AD) commentator Simplicius, who quotes what might be our only *verbatim* fragment of Anaximander's work:

> From what things existing objects come to be, into them too does their destruction take place, "according to what must be: for they give recompense and pay restitution to each other for their injustice according to the ordering of time," (DK B1), expressing it in these rather poetic terms.

The "existing objects" seem to be contrary powers like hot and cold, wet and dry. As some of these become dominant, for instance hot and dry in summer, they are brought to the cosmic tribunal where they make reparations, so that cold and wet prevail in winter. Yet these powers in turn make reparations when their time is up. Thus there is some kind of law-like process of reciprocity that keeps the world from becoming too hot or cold, too dry or wet. The notions of justice here may reflect early democratic ideals of equality before the law. But whatever their source, they show that there is a cosmic balance that is maintained by an impersonal authority, just as justice is maintained in a well-ordered city-state. Anaximander introduced the notion of a "universe governed by law" (Kahn 1960: 166).

Now just what power maintains the order, Anaximander does not say. There are hints that the boundless functions as a kind of higher power that surrounds and controls the cosmos within it. In any case, the world seems to function as a self-sustaining unit that suffers imbalances, but corrects them by itself.

The whole cosmogony begins from the pre-existing boundless, from which and within which the world forms. What exactly the boundless is, Anaximander does not say. He does not seem to think it can be identified with any particular material in the existing world. Some scholars have claimed that the term "boundless," *apeiron* in Greek, meant something like "indeterminate." That is not what the term means; that the boundless is indeterminate may indeed be inferred from the fact that it is cannot be more precisely characterized, but not from the sense of the term. The boundless gets its name from its limitless spatial extension. The boundless is, in Anaximander's words, also "everlasting and ageless," but that is not meant as a tautology, so that the term does not connote the temporally unbounded. It would be anachronistic to translate the term "infinite," since the rigorous mathematical conception that term suggests was not available to Anaximander. Anaximander also says that the boundless "contains all things and steers all things," in the latter case invoking a nautical metaphor. Thus the boundless is like the steersman of a ship that somehow guides the world, and it is in some sense a divine power inasmuch as it is everlasting and steers all things.

Yet the most important dimension of Anaximander's theory is its ability to explain the events of the heavens and earth as natural processes based on natural powers. Evaporation, winds, condensation, heating, and similar processes drive the world. The influence of the boundless is remote while the causes of meteorological events and astronomical movements are familiar natural processes. Anaximander offers a coherent naturalistic explanation of the genesis of the world and its stable functioning. This becomes a sort of paradigm for almost all later Presocratic theorists.

Anaximenes

Anaximenes was Anaximander's successor and flourished around 545 BC. We know little of his life, and ancient reports of his philosophy are meager. No one before Aristotle mentions him by name (*Metaphysics* A.3, 984a5–7 = DK 13 A4) and ancient sources discuss him only briefly (DK lists only twenty-three testimonies; Wöhrle 2012 gives 241, but many are repetitions of a few informed sources). He is often viewed as the most pedestrian of the Milesians. Nevertheless, he made important contributions. Maintaining that everything comes from air, he considered how that transformation might take place. By a process of rarefaction, air turns into fire; by increasing condensation it turns successively into wind, cloud, water, earth, and stones (DK A13 A5, 7). Thus there is a

series of seven basic kinds of stuff from fire to stone, which can be distinguished by their relative densities.

The world arose in a cosmogony in which first the earth formed out of pre-existing air, then the heavenly bodies. The earth is a flat disk that rides on a cushion of air (A6). The heavenly bodies are like leaves blown by winds, or like nails affixed to a firmament, which Anaximenes likens to a felt cap that turns around the head (A14, 16; A7). Possibly he uses the two similes of leaves and nails to distinguish between the fixed stars that hold their relative positions, and lower bodies, specifically the sun and moon, that change their positions relative to the fixed stars (early accounts do not seem to recognize the five visible planets). The sun moves horizontally around the earth, but lofty mountains in the north conceal it during the night.

Anaximenes gave an account of lightning and thunder similar to that of Anaximander. He described rain as condensation of water within clouds, and snow and hail as different types of frozen rain. He explained earthquakes as caused by the cracking of the earth as it dries out after being moistened. He seems to have introduced felting as a model for condensation. In this process, moisture, heat, and pressure are applied to wool, transforming the light fabric into a dense, heavy cloth. Ever after Presocratic thinkers spoke of "felting" as synonymous with condensation.

According to Aristotle, Anaximenes—like Thales—said that there was one kind of matter that functioned as the substratum of all changes—in the case of Thales this was water, in the case of Anaximenes, this was air (*Metaphysics* A.3, 984a5–7 = A4). This air was the ultimate stuff of the universe. By being rarefied or condensed it might manifest itself as fire, water, earth, or some other stuff, but in fact these other element-like bodies are not distinct realities but merely appearances or states of air. On this interpretation, nothing comes to be or perishes, but the ultimate reality, air, merely undergoes qualitative or quantitative modification. Everything in the universe is air in some state or other; when it is not manifest, it continues as a substratum. The theory this interpretation attributes to Anaximenes is known as "material monism."

Most commentators down to the present have accepted Aristotle's interpretation. But it has become more controversial. Material monism seems to presuppose distinctions made only in the fifth century BC by Parmenides. The few descriptions we have of Anaximenes' theory do not avoid talk of coming-to-be, and indeed Plato seems to read Anaximenes' theory as presupposing coming-to-be and perishing (*Timaeus* 49b–c). Thus it is possible that according to Anaximenes' theory air turns into other stuffs in such a way that air perishes as another stuff comes to be. On this interpretation air is a "generating substance" which is transformed into other stuffs, but does not constitute their underlying nature or continue in existence after it is transformed. Accordingly, the initial state of the universe was undifferentiated air and air is the default state of matter, but air is not the only kind of matter: Anaximenes is a pluralist.

Anaximenes seems to hold that intelligence is a property of air, so that air may be able to control the world in the same way that Anaximander's boundless controls *his* world. The life force in the living animal is air, and when the breath ceases the animal dies.

Anaximenes is often faulted for providing a commonplace source of being, air, giving a crude account of the stability of the earth, as being supported by air pressure, and providing a pedestrian account of change as rarefaction and condensation. Yet in some ways these seemingly ordinary modifications are significant advances. Whereas the starting point of the cosmos remains obscure and inaccessible in Anaximander,

Anaximenes can speak of it as an ever-present reality. Instead of mysterious changes between opposites in Anaximander we get a law of change in Anaximenes that can be tested empirically. For Anaximenes provides a testable sequence of transformations from fire to stones, some of which are allegedly observable, as when we heat water in a pot and observe the steam boiling off and dispersing into air. He uses simple "experiments" such as blowing with the lips open or pursed to show how air can be rarefied (heated) or condensed (cooled). If Anaximenes' account of the earth's stability is less imaginative than Anaximander's, it nevertheless explains more and is more amenable to empirical testing.

Xenophanes

Unlike the Milesians, who presumably were independently wealthy and lived their whole lives (except for excursions) at home, Xenophanes lived the life of a wandering minstrel. Born in Colophon in Ionia around 570 BC, he was exiled from his city around the time of the Persian invasion (546 BC) and spent the rest of his life as an itinerant poet in Southern Italy and Sicily. According to a poem he wrote at ninety-two years of age, he began his literary career at twenty-five (DK 21 B8). He wrote a poem commemorating the founding of Elea in Southern Italy, and perhaps partly for that reason he came to be known in antiquity as the founder of the Eleatic school, of whom Parmenides of Elea is the most famous member. Parmenides does seem to echo some of Xenophanes' words in his own philosophical poem, but that is as far as the connections go. Xenophanes is also seen, by both ancients and moderns, as variously a forerunner of skepticism or as a poet without philosophical credentials.

We have a fair number of fragments from Xenophanes' poems, providing both biographical details and philosophical insights. From these we can gather that he was more than just an intellectual poet. While we do not find the kind of rigorous philosophical arguments in the Eleatic style attributed to him by some later commentators, we do find impressive conceptions that point to a coherent philosophical theory in the Ionian style. Xenophanes seems to have included his scientific and philosophical ideas in popular poems rather than to have expounded them in a continuous didactic poem.

According to Xenophanes, the surface of the earth divides the world; below, earth stretches downward without end, and above, presumably air extends without limit (B28). Furthermore, the plane of the earth's surface seems to extend without limits in all directions (A32, 33). There are cycles of wet and dry on the earth; in wet periods much (perhaps all) of the earth's surface is covered by sea, as can be inferred from the fact that fossils of sea creatures are found inland (A33). Xenophanes is the first thinker to consider petrified plant and animal impressions as fossils that reveal changes in the earth's features. During wet periods the human race perishes and must be regenerated during the dry periods.

The sun, the moon, and the stars are incandescent clouds. The sun arises each day as tiny flares gather into a globe. It travels over the earth from east to west and disappears not because it sets but because it passes onward beyond our sight. There are many suns and moons each appearing in a different region of the earth. Presumably over the infinite expanse of earth similar conditions produce similar phenomena. Comets, meteors, shooting stars, and St. Elmo's fire are all forms of luminous clouds, and the rainbow is a similar phenomenon. The stars are quenched by day and kindled at night. The moon's phases result from a gradual quenching and kindling of this "felted cloud." Solar eclipses happen when the sun passes over a desert area that lacks moisture to fuel its illumination (A40–44).

Xenophanes' fragments are ambiguous and the testimonies of ancient authorities are at odds over his theory of matter. He might hold that all things come from earth (and be a monist) or from earth and water (and be a dualist). He says, "for from earth are all things and into earth do all things die" (B27), supporting the first interpretation, and "all things which come to be and grow are earth and water" (B29, cf. B33). He also describes "sea" as the source of water, winds, and clouds (B30). Clouds occupy a prominent place in his cosmology as providing the nature of heavenly bodies and meteorological events. In general, Xenophanes may be a material monist or dualist. He may also hold a "generating substance" view like that which some attribute to Anaximenes, in which the basic substances turn into each other as a result of environmental conditions such as rarefaction or condensation, heating or cooling. In any case, he recognizes alternating periods of wet and dry, as well as a water cycle that draws water into the heavens to fall as precipitation and feed the rivers and seas.

While Xenophanes' theory of nature continues the discussions of his predecessors, he blazes a new trail in his criticisms of religion. Pointing out that the gods of mythology—as recorded in the works of Homer and Hesiod—do things "that are blameworthy and disgraceful for men: | stealing, committing adultery, deceiving each other" (B12), he calls for a sweeping reappraisal of religious views. Anthropomorphism is the cause of major misconceptions: "But mortals think gods are begotten, | and have the clothing, voice, and body of mortals" (B14). If cattle, horses, and lions had hands, they would draw gods in their own likenesses (B15). Thus the popular conception of the gods is flawed by a naive assimilation of the divine to the human, and even to the particular racial and ethnic features of one's own group (B16).

Xenophanes replaces this all-too-human conception of the gods with a rational conception:

> He remains ever in the same place moving not at all,
> nor is it appropriate for him to flit now here, now there.
> (B26)

"But without any toil he shakes all things by the thought of his mind" (B25). Moreover, "All of him sees, all thinks, all hears" (B24). Thus God is a kind of unmoved mover, thoroughly sentient but immobile, able to intervene in the world without lifting a finger. In sum, there is

> One God, greatest among gods and men,
> not at all like to mortals in body nor in thought.
> (B23)

The last statement sounds contradictory to modern ears: there is one God among many gods. This may, however, merely embody a poetic expression meant to identify the unique God, who is utterly unlike humans and alleged gods in form and cognition. This deity is transcendent—as transcendent as Xenophanes can make it. It does have some kind of body with a location, but it escapes the limitations of human physical and mental abilities. Ancient sources report that Xenophanes' God was spherical, and sometimes say his world was spherical as well. The latter claim is certainly false, while the former is suspect. In any case, Xenophanes strongly distinguishes the nature of the divine from the human, and his conceptions mark the beginnings of natural theology that was to influence later philosophical attempts to understand God.

Xenophanes goes beyond his Ionian predecessors in his treatment of the divine, and also in his reflections on human knowledge. While the Milesians had made important assumptions about scientific knowledge, they had not, as far as we know, talked about the method or grounds of knowledge itself. Xenophanes, by contrast, recognizes the limits of knowledge:

> Now the plain truth no man has seen nor will any
> know concerning the gods and what I have said concerning all things.
> For even if he should completely succeed in describing things as they come to pass,
> nonetheless he himself does not know: opinion is wrought over [or: comes to] all.

All human understanding is limited and fallible, even Xenophanes' own. Even if we hit on the right explanation, we cannot know that we have arrived. In the end we have only opinion, not certainty, about the world and the gods.

Xenophanes' modesty led ancient skeptics to claim Xenophanes as one of their own. Yet his outlook leads to optimistic rather than pessimistic conclusions:

> Not from the beginning have the gods revealed all things to mortals,
> but in time by seeking they come upon what is better.
>
> (B18)

Human knowledge is a human affair that has no recourse to divine revelations. But that does not mean it is hopeless; on the contrary, careful inquiry can lead to scientific progress. Xenophanes' views on knowledge seem remarkably similar to those of some modern theorists: though human knowledge is fallible, it is capable of indefinite expansion. Overall, Xenophanes can be seen as an Ionian natural philosopher who extended the domain of inquiry into the realms of rational theology and epistemology.

Heraclitus

Heraclitus criticized Xenophanes and many of his other predecessors. As a harsh critic of other intellectuals, Heraclitus became known as a reclusive misanthrope—which he may have been, though almost no reliable information about his life is known. He lived in Ephesus in Ionia around the end of the sixth century and developed a unique philosophy which he expressed in prose of a unique style: sententious, aphoristic, full of allusions and wordplay. As a result he has often been left out of the alleged school traditions of the Presocratics. Although Heraclitus eschews any connections to his predecessors, he can be seen as providing a searching criticism of Ionian philosophy.

Ancient thinkers including Plato and Aristotle saw Heraclitus as a philosopher of flux and change, in contrast to Parmenides' philosophy of stasis (Plato *Cratylus* 402a, *Theaetetus* 160d; Aristotle *Cael.* 3.1, 298b29–33). Since all things are changing, contradictory statements are true and knowledge is impossible. At the same time, some held that Heraclitus was a material monist who said that all is fire. It should have been evident that these two interpretations are incompatible: if all things are in flux, there is no stability at the level of the substratum; if there is a stable substratum, all things are not in flux. Yet some commentators, including Aristotle, seem to endorse both readings,

and one or other have been defended by modern commentators. There are good reasons to doubt both readings, although there is a sense in which Heraclitus is a philosopher of flux without falling victim to the extreme consequences attributed to him.

There is a way to understand Heraclitus as a penetrating critic of his Ionian predecessors. If one stuff turns into another in the way that Anaximenes supposed, then it does not make sense to call any one stuff, for instance air, the ultimate reality, since each stuff in the series of basic substances from fire to stones is just a stage in an ongoing process. What is now fire will at another moment be water and at another moment earth. What then ensures the unity and stability of the world? Not some one substance surely, if all are changeable, but rather the integrity of the whole process in which one stuff turns into another. What guarantees continuity is the fact that when one parcel of water changes to earth, another parcel of earth changes to water. If this is the case, then what is essential to the working of the cosmos is a balance of interchanges rather than the stability in a single stuff. There must be some kind of law of reciprocal transformation that is even more thoroughgoing than Anaximander's law of compensation. The ultimate reality then will not be a substance, but a law or principle that structures the world. And the substance that best illustrates the nature of substance will be the one which is most inconstant: fire.

Heraclitus is deeply engaged with the problems that his Ionian predecessors dealt with, but he goes beyond them to a new level of understanding. The physics of the Ionians points to a new metaphysics, in which what is important is not a catalogue of basic substances but a law of transformation among them. Heraclitus' law seems to be represented by his *logos*, his account or message or principle, while the substance of fire seems to provide an emblem of the instability of matter. Heraclitus introduces his treatise with this announcement:

> Of this Word's being forever do men prove to be uncomprehending, both before they hear and once they have heard it. For although all things happen according to this Word, they are like the inexperienced experiencing words and deeds such as I explain when I distinguish each thing according to its nature and show how it is. Other men are unaware of what they do when they are awake just as they are forgetful of what they do when they are asleep.
>
> (DK 22B1)

The "Word" here is the *logos*, an account of the way things are, but not just any account: it is the true and definitive representation of reality, one that exists eternally and independently of its spokesman. Most people do not recognize the truth even when they hear it, but act like sleepwalkers in the world.

Heraclitus recognizes a world that is constant:

> This world-order (*kosmos*), the same of all, no god nor man did create, but it ever was and is and will be: ever-living fire, kindling in measures and being quenched in measures.
>
> (B30)

The world is fire, but the fire is being quenched in some places as it is kindled in others. The world-order, the *kosmos*, does not arise from a disorderly state as in the other Ionians, but maintains its integrity—precisely by the balance of measures in the transforma-

tions of fire. These changes too are orderly: "The turnings of fire: first sea, and of sea half is earth, half fireburst" (B31a). That is, fire turns into water, half of which (eventually) turns into earth, which half turns back into fire. Thus we have a sequence of changes as in Anaximenes: fire to water to earth. Moreover, the ratios of the elemental bodies are constant: "<Earth> is liquefied as sea and measured into the same proportion it had before it became earth" (B31b). That is, the ratio of earth to sea is constant. Although it is unclear whether Anaximenes holds that everything is a modification of air or that air perishes into other things, Heraclitus is unusually clear on this issue: "For souls it is death to become water, for water death to become earth, but from earth water is born, and from water soul" (B36). Here souls occupy the place of fire, and the birth of one element serves as the death of another—a paradigm case of coming-to-be and perishing entailing the non-identity of the several stuffs.

Those who claim that Heraclitean flux leads him to endorse contradictory statements typically invoke the identity of opposites. Heraclitus has much to say about the unity of opposites, but he does not necessarily claim opposites are identical. His most precise statement on the topic rather suggests another relationship:

> As the same things in us are living and dead, waking and sleeping, young and old. For these things having changed around are those, and those in turn having changed around are these.
>
> (B88)

The opposites in the first sentences are "the same" by virtue of changing into something else, as the second sentence explains. What changes is not the opposites themselves but the "things" that have the opposites, much as Plato says at one point (*Phaedo* 103a-b). Similarly, "Cold things warm up, hot things cool off, wet things become dry, dry things become moist" (B126). One thing moves from exemplifying one property to exemplifying its opposite. In that sense, there is a continuum that connects the opposites together. Opposites are transformationally equivalent by virtue of occupying contrasting places in a sequence. In this sense hot and cold, for instance are part of a larger interconnected system; but hot and cold are not identical, nor could they be if they are to function in the system.

The constant change between opposites is a kind of flux. Plato, followed by Aristotle (and perhaps following Hippias of Elis and Cratylus), read Heraclitus as saying that everything was in motion like the current of a river, so that one could not step twice into the same river (*Cratylus* 402a). A set of similar statements, known as the "river fragments" conveys this point (A6, B49a, B91). Yet it has been shown that there is only one real river fragment, which says something other than what Plato understands (Marcovich 2001: 206–13):

> On those stepping into rivers staying the same other and other waters flow.
>
> (B12)

This fragment contrasts the sameness of the river with the other waters that fill it. It is, in other words, a given that the river remains *the same* even while the waters *change*. Heraclitus' message is not that everything is changing, but that the changing of some things is balanced by the constancy of other things. In fact, if we consider the example he chooses, the river is constituted precisely by its waters. If the waters failed, there

would no longer be a river, but a dry stream bed; if they ceased to move, there would no longer be a river, but a lake or a pond. The moving waters make the river what it is and are a necessary condition for its existence.

If we turn back to what Heraclitus says about the world (B30, quoted above), we see the same message: the world always was, is, and will be despite, or rather *because of*, the measures of fire that are kindling and being quenched. Any important being, including the world itself, is a dynamic balance of changes that persists over time. Heraclitus sees flux everywhere, but not on every level. Low-level interchanges of matter sustain high-level processes, which in turn organize the ongoing changes. This kind of balance between material interchange and formal stability characterizes Aristotle's world—although Aristotle failed to see in Heraclitus a forerunner of his theory. Heraclitus seems like a process philosopher, for whom nothing is prior to processes, while process organizes reality.

Accordingly, Heraclitus' unity of opposites doctrine does not entail contradictions, nor does the flux he accepts entail chaos. At the heart of the cosmos is a law of interchanges which maintains balance and order, allowing for long-term stability. The orderliness of the cosmos does not preclude knowledge, but makes it possible. Yet knowledge can be won only by considering the complexity of the cosmos. For instance, by contemplating a river, one can recognize that the changes of its water constitute it as an enduring existence. By considering a road, one can realize that it goes both up and down, out and back, to and fro. The curious states of affairs Heraclitus focuses on reveal the hidden complexity in simple unities and provide the material for philosophical insights. Rather than announcing generalities such as "All is water", Heraclitus offers particular images and invites his audience to generalize.

Heraclitus allots an important place to sense experience: "The things of which there is sight, hearing, experience, I prefer" (B55); but the evidence of the senses needs interpretation: "Poor witnesses for men are the eyes and ears of those who have barbarian souls" (B107). Just as a hearer needs to understand a speaker's language, the perceiver needs to grasp the language of the senses. Heraclitus does not, then, reject sense experience, but he does criticize people in general, as well as poets and philosophers in particular, for a naive reaction to it: "Learning many things does not teach understanding. Else it would have taught Hesiod and Pythagoras, as well as Xenophanes and Hecataeus" (B40). Rather than just collecting information and facts, one should seek for a deeper understanding: "If one does not hope for the unhoped-for, one will not discover it, since it is undiscoverable and inaccessible" (B18). Ultimately, sages and philosophers fail to perceive the deeper truths: "Of all those whose theories I have heard, not one has attained to a knowledge of what the wise is separate from everything else" (B108). Heraclitus gives the secret of wisdom: "Wisdom is one thing: to know the will that steers all things through all" (B41). Indeed, this is the message of the *Logos*: "Having harkened not to me but to the account, you should agree that wisdom is knowing that all things are one" (B50).

In speaking of what steers all things Heraclitus uses the same metaphor as Anaximander: the pilot of the world. He goes so far as to identify the pilot: "Thunderbolt steers all things" (B64). The thunderbolt is a manifestation of fire, and the traditional weapon of Zeus. Yet here Zeus seems to dwindle into the fire he wields. Heraclitus goes on to say, "One being, the only wise one, would and would not be called by the name of Zeus" (B32). For "Zeus" he uses the unusual form *Zēn*, which is also the word for "life," reminding us of the epithet "ever-living" he uses of fire in B30. The ultimate being is

and is not Zeus. What is important for Heraclitus is not the name but the unifying power that keeps the world together.

Heraclitus provided a cosmology which is represented in testimonies but not in fragments. The sun and moon are bowl-like structures filled with fire, fed by vapors from the earth. As long as the hollow of the bowl is turned towards the earth, we see the fire; when it turns away the fire is blocked, as happens gradually with the waning of the moon.

Heraclitus' theory includes, for the first time in philosophy, ethical reflections and political philosophy. "The character of a man is his guardian spirit" (B119), he says, indicating that one's happiness and fate are determined by one's own agency rather than by the whims of the gods. Further, it is reason that makes life worth living: "Sound thinking is the greatest virtue and wisdom: to speak the truth and to act on the basis of an understanding of the nature of things" (B112). Heraclitus had strong views about politics, including the incompetence of his fellow citizens (B121). In general he advocates supporting the rule of law:

> The people [of a city] should fight for their laws as they would for their city wall.
>
> (B44)

> Speaking with sense we must fortify ourselves in the common sense of all, as a city is fortified by its law, and even more forcefully. For all human laws are nurtured by the one divine law. For it prevails as far as it will and suffices for all and is superabundant.
>
> (B114)

At this point a notion of natural law seems to emerge. There is some "divine" law that preexists and validates human laws. This divine law reminds us of the *Logos*, with which it may be identical or which may be its archetype.

The Ionian project

We could group the Ionian philosophers together just as a historical and geographical convenience: they were the first philosophers, or proto-philosophers, despite significant differences in their approaches and theories, and they all hail from the same part of the Mediterranean world. Further, once we remove the barriers that were imposed by earlier classifications into schools, we can glimpse a continuity among these thinkers that seems to provide a deeper justification for the grouping. In the first place, they are all committed to a naturalistic understanding of the world. The epic and lyric poets who had preceded the Ionians saw the world as arising in a theogony in which one deity begat another in a divine genealogy that also happened to be a cosmogony—for the deities included Earth, Heaven, Ocean, Hills, and other personified cosmic features. These deities continued to dominate the world, sending good or bad weather, thunderstorms, lightning, earthquakes, rainbows, plagues, victory and defeat, summer and winter. The Ionians, by contrast, rejected, or at least ignored mythological accounts of the world and countenanced only naturalistic explanations—those in which the events of the world were caused by natural processes. Evaporation led to the formation of clouds, winds, rain, and lightning. Some sort of atmospheric conditions were responsible for plagues and epidemics. The Ionians disagreed strongly among themselves on the basic

constituents of the world and the mechanisms that drove them, but they agreed on the underlying principle that all events in the world were fundamentally natural events driven by natural processes (although they often recognized some fundamental reality as having divine powers).

Furthermore, the Ionians shared a common framework of explanation. Their goal included the articulation of a story in which the cosmos arose and reached its present state, starting with the cosmogony of Anaximander. Xenophanes and Heraclitus seem to abandon the cosmogony, but they acknowledge a cyclical or a steady-state cosmology in which humans have their place. Increasingly the human condition comes to the fore in Xenophanes and Heraclitus, but even then the cosmos takes precedence in the order of explanation. The *Logos* characterizes the world as a whole for Heraclitus. The human soul is part of a series of substances of the world, apparently a certain fiery state of matter. Anaximander introduced the cosmological study in prose as a new genre of writing: the treatise *On Nature*. (The title was formulated in the later fifth century and applied, on the basis of their subject matter, to works that earlier had no titles.) Many of his successors followed that format, though not Xenophanes and Heraclitus. Xenophanes put his thoughts into popular poems for performance. Heraclitus wrote in a gnomic style reminiscent of wisdom literature. In both cases they showed how the conceptions of philosophical reflection did not depend on the medium of the prose treatise for their expression. A popular performer could disseminate them to a larger audience in verse, while an aristocratic writer could reach a select audience through a collection of pointed aphorisms.

While we have no extended debate among Ionian philosophers, we can see their influence in the historian Herodotus (himself a native of Ionia), who discusses three scientific explanations of the Nile floods in Egypt, one by Thales, one by Hecataeus, and one by Anaxagoras (*Histories* 2.20–26). While on a visit to Egypt, Herodotus was unable to get a satisfactory explanation of the floods from Egyptian priests (who probably offered mythological accounts). Instead, he criticizes the three theories before him and offers his own explanation with appropriate physical arguments. Evidently intellectuals from around the Greek world learned to think about natural phenomena in the Ionic mode by reading the philosophers. To that extent Ionian philosophy contributed to critical attitudes towards history, and no doubt vice versa.

Besides sharing a general approach to explanation, the Ionians built up a corpus of explanations that at least at certain points indicated a convergence. Thus Anaximander's theory of thunder and lightning as caused by winds in the clouds was repeated with variations by Anaximenes and a number of later figures. Some sort of process of evaporation is adumbrated in Anaximander and Anaximenes, and developed in Xenophanes as an account of the water cycle: vapors from the seas rise into the atmosphere, condense into clouds, form water drops that rain and return water to the surface of the earth. Most of the Ionians also seem to believe that the vapors provide fuel for the fiery manifestations of the heavenly bodies. Thus there is a kind of ecological relationship between phenomena of the earth and meteorological phenomena, as well as astronomical phenomena. Alternations between wet and dry are built into Anaximanders' theory of matter, and they form a basis for Xenophanes' explanation of fossils.

Ultimately the naturalistic explanations of the Ionians give rise to theoretical reflections on the method itself. Xenophanes argues that scientific information does not come directly from the gods, but is gained by a very human method, presumably something akin to trial and error. Yet this method suffices to make discoveries and increase knowledge. For his part, Heraclitus considers knowledge to arise as a kind of insight

from reflection on particular situations. Commentators have viewed him alternatively as a radical empiricist or a mystic. He recognizes the value of sense experience, but does not regard it as sufficient for wisdom. A genuine understanding comes from interpreting the information correctly. His views are not incompatible with empiricism, yet they are not straightforwardly empiricist either. Repeated exposure to phenomena will not make one wise. One must see the pattern in events. There is not, however, an algorithm for understanding, so that general prescriptions fail. One can learn to interpret only by practicing on meaningful situations. That is why Heraclitus provides puzzles for the reader to resolve. They become examples of how to construe the inscrutable events one confronts in experience. Heraclitus is not anti-scientific, but he focuses on the phase of scientific inquiry that most scientists ignore: the context of discovery.

With methodological reflection comes a genuinely philosophical engagement with the problems of knowledge. Before Xenophanes and Heraclitus we can wonder whether the inquiries of the Ionians constitute genuine philosophy or science. They are indeed pre-scientific and proto-philosophical efforts to explain the world. But when thinkers ask how they can know that their inquiries will lead to knowledge, they are philosophizing in a familiar way, confronting foundational questions about knowledge as they grapple with the natural world. Philosophy begins with wonder, as Aristotle says, and develops into increasingly sophisticated ways of explaining the world. Xenophanes faced the problem of how we can know without despairing, but also without appealing to false comforts of certainty. Heraclitus took refuge in an eternal order that was bigger than the human knower.

Finally the Ionians form a tradition because they learn from each other. They build on earlier theories, criticize them, and modify them. Anaximander provides a paradigm with his cosmogony-cosmology. Anaximenes provides a theory of elemental change. Xenophanes applies a similar theory to the world, reflects on the methodology, and extends reflection to theology. Heraclitus tacitly criticizes Anaximander, expressly criticizes Xenophanes, and reflects on Anaximenes' theory of elemental change to develop a new metaphysics and put new emphasis on the place of human observers in the cosmos. In this process tradition, criticism, methodological reflection, and innovation lead from something like crude speculation on nature to something like philosophical reflection on nature and the human condition.

There is much we do not know about the intellectual environment in which Ionian philosophy arose. But from what we do know, the Ionians still look like the founders of the philosophical and scientific traditions. They effected a revolutionary change in the way at least some Greeks saw the world and their own place in it. In the fifth century BC, cosmological speculation continued, now challenged by the criticisms of Parmenides and his followers. The sophistic movement carried thought in new, more practical directions, and Hippocratic medicine applied quasi-scientific theory to medical problems. But all of these movements owed their inspiration to the early Ionian thinkers who began to explain the world as an autonomous realm with its own rationally discernible order.

References and further reading

Adoménas, M. (1999) "Heraclitus on Religion," *Phronesis*, 44: 87–113.

Barnes, J. (1982/1979) *The Presocratic Philosophers* (Revised edn.), London: Routledge & Kegan Paul. (A sophisticated philosophical study of the Presocratics.)

Bodnár, I. M. (1992) "Anaximander on the Stability of the Earth," *Phronesis*, 37: 336–342.
Classen, C. J. (1965) "Bemerkungen zu zwei griechischen 'Philosophiehistorikern'," *Philologus* 109: 175–181. (A study of early doxography.)
Classen, C. J. (1977) "Anaximander and Anaximenes: The Earliest Greek Theories of Change?" *Phronesis*, 22: 89–102. (A study of the first treatments of change.)
Dancy, R. M. (1989) "Thales, Anaximander, and Infinity," *Apeiron*, 22: 149–190. (A study of the concept of *apeiron*.)
Dicks, D. R. (1959) "Thales," *Classical Quarterly*, 9: 294–309. (A cautious treatment of Thales.)
Diels, H. (1951) *Die Fragmente der Vorsokratiker*, W. Kranz (ed.) (6th edn.). Berlin: Weidmann (3 vols.). (The standard edition of the Presocratics, in Greek and German, but now about sixty years out of date.)
Engmann, J. (1991) "Cosmic Justice in Anaximander," *Phronesis*, 36: 1–25. (A revisionary treatment of Anaximander's notion of justice.)
Finkelberg, A. (1990) "Studies in Xenophanes," *Harvard Studies in Classical Philology*, 93: 103–167. (Treats topics in the interpretation of Xenophanes.)
Fränkel, H. (1974) "Xenophanes' Empiricism and his Critique of Knowledge (B34)," in A. P. D. Mourelatos, *The Pre-Socratics: A Collection of Critical Essays*, Garden City, N.Y.: Anchor. (An influential study of Xenophanes' epistemology.)
Gigon, O. (1968/1945) *Der Ursprung der griechischen Philosophie* (2nd edn.), Basel: Schwabe. (Study of early Presocratic philosophy.)
Gottschalk, H. B. (1965) "Anaximander's *Apeiron*," *Phronesis*, 10: 37–53. (A study of the concept *apeiron*.)
Graham, D. W. (1997) "Heraclitus' Criticism of Ionian Philosophy," *Oxford Studies in Ancient Philosophy*, 15: 1–50. (Heraclitus as a critic of his predecessors.)
Graham, D. W. (2003a) "A New Look at Anaximenes," *History of Philosophy Quarterly*, 20: 1–20. (Rejection of material monism.)
Graham, D. W. (2003b) "Philosophy on the Nile: Herodotus and Ionian research," *Apeiron*, 36: 291–310. (Herodotus as participating in Ionian debates.)
Graham, D. W. (2006) *Explaining the Cosmos: The Ionian Tradition of Scientific Philosophy*, Princeton: Princeton University Press. (A study of early scientific philosophy.)
Graham, D. W. (2010) *The Texts of Early Greek Philosophy*, (2 vols.) Cambridge: Cambridge University Press. (A new bilingual edition of the Presocratics.)
Granger, H. (2004) "Argumentation and Heraclitus' Book," *Oxford Studies in Ancient Philosophy*, 26: 1–17. (A study of Heraclitus' style of argument.)
Gregory, A. (2007) *Ancient Greek Cosmogony*, London: Duckworth. (A survey of Greek theories of cosmogony, starting with the Presocratics.)
Hahn, R. (2001), *Anaximander and the Architects*, Albany: SUNY Press. (Explores the influence of architectural influences on Anaximander.)
Kahn, C. H. (1960) *Anaximander and the Origins of Greek Cosmology*, New York: Columbia University Press. Reprint Indianapolis: Hackett, 1994. (A classic study of Anaximander.)
Kahn, C. H. (1964) "A New Look at Heraclitus," *American Philosophical Quarterly*, 1: 189–203.
Kahn, C. H. (1979) *The Art and Thought of Heraclitus*, Cambridge: Cambridge University Press. (An edition of Heraclitus with insightful commentary.)
Kirk, G. S. (1954) *Heraclitus: The Cosmic Fragments*, Cambridge: Cambridge University Press. (An edition of the fragments on the cosmos with commentary.)
Kirk, G. S., Raven, J. E., & Schofield, M. (1983/1957) *The Presocratic Philosophers* (2nd edn.), Cambridge: Cambridge University Press. (The standard advanced textbook on the Presocratics.)
Lesher, J. H. (1978) "Xenophanes' Scepticism," *Phronesis*, 23: 1–21. (A study of Xenophanes' epistemology.)
Lesher, J. H. (1992) *Xenophanes of Colophon: Fragments*, Toronto: University of Toronto Press. (A bilingual edition of Xenophanes with commentary.)
Long, A. A. (ed.). (1999) *The Cambridge Companion to Early Greek Philosophy*, Cambridge: Cambridge University Press. (Helpful introductory treatment of the Presocratics.)
Mansfeld, J. (1990) *Studies in the Historiography of Greek Philosophy*, Assen: Van Gorcum. (Essays on the transmission of ancient interpretations of the Presocratics.)
Mansfeld, J. (2009) "Bothering the Infinite: Anaximander in the Nineteenth Century and Beyond," *Antiquorum Philosophia*, 3: 9–68. (A study of how modern interpretations of Anaximander developed.)
Marcovich, M. (2001/1967) *Heraclitus* (2nd edn.), Sankt Augustin: Academia Verlag. (A valuable bilingual edition of Heraclitus with commentary.)

McKirahan, R. D. (2010) *Philosophy before Socrates* (2nd edn.), Indianapolis: Hackett. (A helpful introductory textbook.)
Mouraviev, S. (1999–) *Heraclitea*, (11+ vols.) Sankt Augustin: Academia Verlag. (Multivolume edition of Heraclitus with texts in Greek and Latin, and translations in French, English, and Russian; commentary in French.)
Mourelatos, A. P. D. (1973) "Heraclitus, Parmenides, and the Naive Metaphysics of Things," in E. N. Lee, A. P. D. Mourelatos and R. Rorty (eds.), *Exegesis and Argument*, Assen: Van Gorcum. (Study of the philosophical motivations of Heraclitus and Parmenides.)
Mourelatos, A. P. D. (2008) "The Cloud-Astrophysics of Xenophanes and Ionian Material Monism," in P. Curd and D. W. Graham (eds.), *The Oxford Handbook of Presocratic Philosophy*, New York: Oxford University Press. (A study of Xenophanes' astronomy.)
Naddaf, G. (1998) "On the Origins of Anaximander's Cosmological Model," *Journal of the History of Ideas*, 59: 1–28. (A study of the origin of Anaximander's conceptions.)
Nussbaum, M. C. (1972) "*Psyche* in Heraclitus," *Phronesis*, 17: 1–16; 153–170. (A classic study of Heraclitus' psychology.)
O'Grady, P. F. (2002) *Thales of Miletus: The Beginnings of Western Science and Philosophy*, Aldershot: Ashgate. (Monograph studying Thales' theories.)
Patzer, A. (1986) *Der Sophist Hippias als Philosophiehistoriker*, Frieburg: Karl Alber. (Reconstruction of Hippias' early doxographical collection.)
Robinson, T. M. (1987) *Heraclitus*, Toronto: University of Toronto Press. (An accessible bilingual edition of Heraclitus' fragments.)
Snell, B. (1944) "Die Nachrichten über Thales und die Anfänge der griechischen Philosophie- und Literaturgeschichte," *Philologus*, 96: 170–82. (Discovery of the source for doxography of Thales.)
Solmsen, F. (1962) "Anaximander's Infinite: Traces and Influences," *Archiv für Geschichte der Philosophie*, 44: 109–131. (The reception of Anaximander's *apeiron*.)
Stokes, M. C. (1962–1963) "Hesiod and Milesian Cosmogonies," *Phronesis*, 7: 1–37; 8: 1–34. (Explores continuities between Hesiod and the Milesians.)
Stokes, M. C. (1971) *One and Many in Presocratic Philosophy*, Washington, D.C.: Center for Hellenic Studies. (A revisionary interpretation of the Presocratics.)
Vlastos, G. (1955) "On Heraclitus," *American Journal of Philology*, 76: 337–378. (A classic study of Heraclitus' philosophy.)
Warren, J. (2007) *Presocratics: Natural Philosophers before Socrates*, Berkeley, CA: University of California Press. (An introductory presentation of Presocratic philosophers.)
White, S. A. (2002) "Thales and the Stars," in V. Caston and D. W. Graham (eds.), *Presocratic Philosophy*, Aldershot: Ashgate. (A study of Thales' astronomy.)
Wöhrle, G. (1993) *Anaximenes aus Milet: Die Fragmente zu seiner Lehre*, Stuttgart: Franz Steiner Verlag. (An edition of Anaximenes in Greek and German.)
Wöhrle, G. (2009) *Die Milesier*, vol. 1: *Thales*. Berlin: De Gruyter. (An exhaustive edition of testimonies of Thales in Greek and German.)
Wöhrle, G. (2012) *Die Milesier*, vol. 2: *Anaximander und Anaximenes*. Berlin: De Gruyter. (An exhaustive edition of testimonies of Anaximander and Anaximenes in Greek and German.)

Related chapters

1. The world of early Greek philosophy
3. Parmenides, Zeno, and Melissus

3
PARMENIDES, ZENO, AND MELISSUS

Stephen Makin

Parmenides, Zeno and Melissus, philosophers of the fifth century BC, are often grouped together by scholars. They are sometimes referred to collectively as the *Eleatics*, after Elea in southern Italy, the home city of both Parmenides and Zeno (Melissus came from the Greek island of Samos). The connection between them is generally taken to turn on an opaque set of views enunciated by the earliest of the three, Parmenides. Each of the three can be taken as representative of a distinct philosophical strategy. Parmenides was an innovator, in that he offered positive arguments for a novel and provocative set of views about the nature of reality. Zeno was a defender, in that he attacked those who thought Parmenides' ideas sufficiently absurd that they could be rejected out of hand. Melissus developed Parmenides' thought by arguing, often in fresh ways, for views which, while fundamentally Parmenidean, differed in some details from those originally set out by Parmenides. I will accept this framework in what follows, although this account of the relation between Parmenides, Zeno and Melissus is not universally accepted. (See Plato's *Parmenides* 126b–129a for the source of the view of Zeno as a defender of Parmenides; for critical discussion see Solmsen 1971, Vlastos 1975, Barnes 1982: 234–237; on Parmenides and Melissus see Palmer 2004; for a treatment of all three see Palmer 2009: Chapter 5.)

Parmenides I: the argument structure

Parmenides' poem is conventionally divided into three parts. First there is an introduction which sets the structure for the poem as a whole: Parmenides approaches a goddess who offers to teach him both the true nature of reality and a more familiar mortal perspective:

> It is proper that you should learn all things, both the unshaken heart of well-rounded truth, and the opinions of mortals, in which there is no true reliance. But nonetheless you shall learn these things too, how what is believed would have to be assuredly, pervading all things throughout.
>
> DK 28 B1.28–32 (translations throughout as in KRS)

We are fortunate that a good deal of the second part of Parmenides' poem, concerning "the unshaken heart of well-rounded truth" has been preserved, quite deliberately,

by Simplicius, a Neoplatonist philosopher and commentator on Aristotle of the sixth century AD. He had access to the poem, but recognized that copies were rare. Included amongst the passages Simplicius quotes are forty nine consecutive lines of argumentation in which Parmenides argues for a striking and highly revisionary account of the nature of reality (this is the lengthy fragment reproduced as DK 28 B8).

Far less of the third part of the poem, an account of "the opinions of mortals" has survived. There is considerable disagreement as to Parmenides' purpose in providing this account (see Curd 1998: Chapter 3 for a discussion). I will say no more about this part of Parmenides' poem, other than to note that any interpretation of Parmenides' general outlook has to accommodate the fact that he did offer what seems to have been a lengthy and quite detailed account of the natural world (the surviving fragments include reference to the heavenly bodies, animal reproduction, embryology and the nature of thought, DK 28 B 10–12, 16–19).

Parmenides' positive views are driven by an insight which is at the very heart of philosophical thinking. This is the idea that *thought* is a more reliable guide to the true nature of reality than perception and commonsense:

> For never shall this be forcibly maintained, that things that are not are, but you must hold back your thought from this way of enquiry, nor let habit, born of much experience, force you down this way, by making you use an aimless eye or ear and a tongue full of meaningless sound: judge by reason the strife-encompassed refutation spoken by me.
>
> DK 28 B7

This short passage is one of the few Parmenidean fragments preserved by a source other than Simplicius (the first two lines are quoted twice, with some variations, by Plato at *Sophist* 237a and 258d; the rest by Sextus Empiricus writing in the second century AD). We can extract the following four points concerning Parmenides' procedure. First, Parmenides is well aware that the views he offers are very much at odds with common sense, and are highly contentious (his whole argument is a "strife-encompassed refutation," that is, of ordinary human opinion). Second, he warns against rejecting his views simply on the grounds that they are greatly at odds with the common outlook (he warns against being guided by "habit, born of much experience"). Third, we should decide on Parmenides' claims by thinking through the arguments he offers in their support ("judge by reason"). And fourth, Parmenides thinks that what prevents most people from understanding the true nature of reality is some sort of error concerning *being* and *not-being* ("never shall this be forcibly maintained, that things that are not are").

How could thought establish the nature of reality? The goddess offers Parmenides a choice:

> Come now and I will tell you … the only ways of enquiry that are to be thought of. The one, that [it] is and that it is impossible for [it] not to be, is the path of Persuasion (for she attends upon Truth); the other, that [it] is not and that it is needful that [it] not be, that I declare to you is an altogether indiscernible track: for you could not know what is not—that cannot be done—nor indicate it.
>
> DK 28 B2

This is clear in outline: there are two alternatives, one of which leads to truth and one of which is described as "indiscernible." But what more sense can we make of the passage? The alternatives are described as "ways of enquiry." The image is that of setting off from some starting point along an investigative enquiry into the world, resulting in an account of the nature of that world. There are two ways of enquiry because there are two starting points. The core of the first starting point is given by a single Greek word *estin*, the third person singular present indicative of the verb *to be*; the core of the second by the negation of the same word, *ouk estin*. English requires a subject for these verbs, as provided by the parenthesized [it] in the passage quoted, but it is important not be mislead by this into thinking that Parmenides has a determinate subject in view from the outset. It is preferable to understand the two "ways of enquiry" as follows (see Furth 1974). Suppose you start investigating the world around you, trying to establish what it is like. If you follow Parmenides' first way then you will limit your claims about the world only to those which can be expressed using forms of the positive verb "[it] is": for example, that water is wet, that there are fish in the sea and that there are elephants in distant countries. By contrast if you follow Parmenides' second way you will limit your claims about the world only to those which can be expressed using forms of the negative verb "[it] is not": for example, that sand is not nourishing, that sheep are not flying animals and that there are no dragons.

Given just this minimal characterization, we can see why Parmenides' description of the two ways would also include some reference to necessity and impossibility. If you are going to follow the first way, limiting yourself to claims involving "[it] is" and abjuring those which involve "[it] is not," then you will not be able to claim, for example, that there are fish in the sea but there need *not* have *been*—the italicized terms import the forbidden negative "[it] is not." So you will in effect be limited to mentioning only what is *and has to be* (that is, what "is … and is impossible … not to be"). Likewise *mutatis mutandis* if you follow the second way: you will not be able to claim that there are no elephants in Greece but there could have *been* – the final italicized term is an instance of the forbidden positive "[it] is." (See Palmer 2009 for an interpretation which places far more emphasis on the references to necessity and impossibility.)

Parmenides thinks only one of these ways of enquiry is coherent: the first way is "the path of Persuasion (for she attends upon Truth)"; the second way "is an altogether indiscernible track." Two questions immediately arise. Why does Parmenides rule out the second as a possible way of enquiry? And what would it matter if the second way were ruled out, since surely no-one (outside a philosopher's fantasy) would try investigating and describing the world while limiting themselves to using only forms of the negative verb "[it] is not"?

Parmenides II: ways of enquiry

Parmenides says something explicitly about the first question in the quoted passage: "you could not know what is not—that cannot be done—nor indicate it" (see also DK 28 B6, B7). We have here the driving thought behind Parmenides account of the nature of reality. An engaging way in to Parmenides' thought is the following (cf. Owen 1960). *Knowing* and *indicating* seem to be relations, and therefore to require *relata* between which they hold. Further, it may well seem plausible that one important difference between a significant bit of language, such as "tree," and a mere noise, such as "harrumph," is that "tree" is a sound somehow related to something in the world, whereas

"harrumph" is merely a sound produced by throat clearing. (It is another—and very difficult—question how human beings can manage to get "tree" to relate to something in the world; but the point here is just that its doing so is partially constitutive of its being significant, rather than a mere noise.) But given all that, it is very hard to see how non-existents could be known or indicated. Suppose, following the second way, I try saying "there are no dragons." How could what I have said be true? If there really are no dragons, then "dragon" will be a mere noise, just like "harrumph."

Of course Parmenides will be unmoved if someone points out there *are* things in the world for "dragon" to connect with: drawings, children's stories or ideas in the head. For to make that move is just to allow that after all there *are* dragons, but that they are pictures or story-beasts, rather than giant reptilian fire-breathers. In that case, while "there are no dragons" could be significant, it would be false. But it will be impossible to express any truth correlated with that falsehood without straying from Parmenides' second way. Suppose I say "there are no giant reptilian dragons, but *there are* story-dragons." Then I have, contrary to the strictures of the second way, used the positive verb form "[it] is."

Now recall the second question above. Why would it matter if Parmenides' second way of enquiry were ruled out, since no-one ever does go around investigating the world while limiting themselves to using only forms of the negative verb "[it] is not"? The point of introducing the second way is to focus our minds on the problems which arise when using forms of the negative verb "[it] is not." Of course, no-one uses *only* those forms. Human enquiry more typically follows a third way, using *both* the positive "[it] is" *and* the negative "[it] is not." Investigation of the world typically churns out claims like "there are mountains to the north, but none to the south. Of those in the north, some are very high and snow capped even when the weather here is not too cold, but others have no snow, and are not impassable in the winter months …" Accepting Parmenides' strictures against the second way plays havoc with this third way, and later in the poem Parmenides says explicitly that he is effectively ruling out two ways of enquiry:

> What is there to be said and thought must needs be: for it is there for being, but nothing is not. I bid you ponder that, for *this is the first way of enquiry from which I hold you back*, but then *from that on which mortals wander knowing nothing, two headed*; for helplessness guides the wandering thought in their breasts, and they are carried along, deaf and blind at once, dazed, undiscriminating hordes, who believe that to be and not to be are the same and not the same; and the path taken by them all is backward turning.
>
> DK 28 B6 (emphases added)

What is problematic about Parmenides' second way is that it *uses* the negative form "[it] is not" rather than that it uses *only* that form. In that case applying the lessons learned from Parmenides' rejection of the second way leads us to see that the third way—the way "on which mortals wander"—needs to be purged of the problematic negative form "[it] is not" if it is to be a permissible way of enquiry. Purging the third way of any uses of the negative "[it] is not," however, leaves us with a way of enquiry which can avail itself only of the positive form "[it] is"; and that takes us right back to the first way which Parmenides mentioned, as being the only coherent way to pursue enquiry into the nature of reality.

Parmenides III: the nature of reality

Parmenides offers his own view of the nature of reality in forty-nine lines of dense and difficult argumentation: the earliest block of sustained philosophical argument preserved in the history of western philosophy. The image of a single permissible way of enquiry re-appears at the start, and is followed by an outline of the account Parmenides will champion

> There still remains just one account of a way, that it is. On this way there are very many signs, that being uncreated and imperishable it is, whole and of a single kind and unshaken and perfect
>
> DK 28 B8.1–4

It is not possible to look in detail at all of Parmenides' arguments. Many are opaque, and in some cases it is unclear precisely for what position Parmenides is arguing. We can, however, appreciate in a couple of cases how a Parmenidean renunciation of the negative verb form "[it] is not" would deliver striking conclusions about the nature of reality.

> For what birth will you seek for it? How and whence did it grow? I shall not allow you to say nor to think from not being: for it is not to be said nor thought that it is not
>
> DK 28 B8.6–9

We are debarred from saying of anything that it has come into existence. For if we suppose that something has come into existence then we are saying that there is such a thing now, but earlier on *there was not* any such thing. But the italicized words are a form of the prohibited negative "[it] is not." So following the only permissible way of enquiry into the world will reveal that the true nature of reality excludes the type of temporary existent with which we are most familiar: dogs, oak trees, mountains. Further, if we cannot talk sensibly about something coming into existence, or—for related reasons—going out of existence, then we will not be able to talk sensibly about anything changing either. Change involves there being something new in the world. If the leaves are to have turned from green to brown, there must be brown leaves now where previously *there were no* brown leaves, and the green leaves which were here earlier must *not be here* any more (see DK 28 B8.26–28). Or again, it is hard to see that there can be any genuine variety in the world: for example, that over here there is a dog but over there *there is no* dog ("So it is all continuous: for what is draws near to what is" DK 28 B8.25)—indeed, many have taken Parmenides to be defending a form of monism, and claiming that reality is both undifferentiated and unique (but see Barnes 1979, Curd 1991 for criticism of the orthodox view of Parmenides as a monist; see also my later remarks on Melissus).

The interpretation and explication of any particular argument in the long fragment DK 28 B8 is certain to be contentious. Parmenides is breaking new ground, his poetic form of writing is not conducive to clarity, and he sometimes writes in what seem like figurative ways (how literally are we to take the claim at DK 28 B8.42–44 that "since there is a furthest limit, it is perfected, like the bulk of a ball well-rounded on every side, equally balanced in every direction from the center"?) The most important thing

to take from this brief survey of Parmenides' work for the present, though, is the driving idea that one cannot speak or think of what is not.

Zeno I: the purpose of his arguments

Most people coming upon Parmenides' poem would not be inclined to take his account of reality seriously. We can recognize that his concerns about "what is not" point to issues of philosophical importance. And we can admire the argumentative rigor which he achieved at such an early stage in the history of western philosophy. But the idea that *really* there is, for example, no coming into and going out of existence, no change, and no variety in the world seems ridiculous. There is much in Parmenides to disentangle, but one might think that there is no *need* to disentangle it in order to preserve our confidence that the familiar commonsense view of things gets the basics correct. There *are* things which come into and go out of existence; there *are* things which change, both in what they are like and in where they are; and there are *lots* of such things. All this seems to be obvious, and the Parmenidean alternative to be absurd.

Zeno of Elea sought to redress the dialectical balance somewhat in Parmenides' favor by shaking the confidence we all feel in the basic features of our familiar world view. Of course, if that is Zeno's purpose then we would expect his arguments to connect with and challenge *our* commonsense outlook, rather than make any explicit reference to *Parmenides*' ideas and arguments; and in that case it will be unsurprising that Zeno could equally be treated as a freewheeling paradox-monger, out to raise problems for anyone he can. (For this view of Zeno see Barnes 1982: 231–237.)

Our earliest source for Zeno's arguments about motion—some of which could be adapted to apply to change more generally—is Aristotle. He is concerned with the arguments insofar as they raise issues of independent interest for him about the divisibility and continuity of space and time, and so he feels no need to quote Zeno. As was the case with Parmenides, Simplicius does reproduce some of Zeno's own words, but the evidence is that Zeno wrote a good deal more than has been preserved. I will concentrate on Zeno's arguments concerning plurality and motion, since these relate most directly to Parmenides. But one should note that there are other arguments associated with Zeno which are not obviously tied to Parmenides' views. (Aristotle reports a Sorites-type argument concerning perceptible sound at *Physics* 7.5, 250a19–25, and an argument about the existence of place at *Physics* 4.1, 209a23–25 and 4.3, 210b22–27.)

Our main evidence for Zeno as a defender of Parmenidean monism is the opening pages of Plato's dialogue *Parmenides* (126a–130a). According to Plato's report, Zeno's arguments concerned plurality, and had a common form. Plato gives just one example: if there are many things, then the same things are both like and unlike (*Parmenides* 127e–128a). No ancient explication of *this* argument has survived, but Simplicius provides two arguments of this type. Claiming to quote "Zeno's own very words" Simplicius reports the argument that if there are many things the same things are both limited and unlimited (DK 29 B3). Simplicius also moves back and forth over a Zenonian argument that if there are many things then they must be both small, indeed of no size at all, and large, indeed of unlimited size (DK 29 B1, B2). It is unlikely, though, that all Zeno's arguments were of this single form, since it would be hard (although not impossible) to force the Zenonian arguments about motion into this structure.

Zeno II: arguments about plurality

According to Simplicius the following are Zeno's own words:

> If there are many things, it is necessary that there are just as many as they are, and neither more nor less than that. But if they are as many as they are, they will be limited (*peperasmena*).
>
> If there are many things, the things that are are unlimited; for there are always others between the things that are, and again others between those. And thus the things that are are unlimited (*apeira*).
>
> DK 29 B3

The issue appears to be the *number* of things which there are. Common sense tells us that there are lots of things in the world. How many? The first limb of the argument suggests this line of thought: However many there are, there are surely a *determinate* number ("just as many as there are"; the contrast between the Greek *peperasmena* and *apeira* is as well captured by the translations "determinate" and "indeterminate" as by the more familiar "limited/finite" and "unlimited/infinite"). Presumably there could have been more or fewer; but in fact, there are *this* many—a determinate number.

The second limb of the argument, however, suggests a Zenonian recipe for adding extra items to the world at will. Take just two of the huge variety of things we think the world contains: my garden hedge and my lawn. Why am I confident that they are *two* things? An appealing answer is that there is something else which separates them from one another: a flower bed in between them. But Zeno will now ask the same question about the garden hedge and the flower bed. If I answer that there is something else between them too—for example some sand – then Zeno will ask the same question about the flower bed and the sand. It looks as if Zeno has a way of adding an extra thing whenever I try to focus down on just *two* of the things which I suppose the world to contain. Further, I am no better off in my common sense outlook if I try to stop these questions by saying that there doesn't have to be anything which separates distinct things. For then Zeno can ask why I count my lawn as just *one* of a pair of things (lawn and hedge), rather than as two things: a right-side and a left-side lawn pushed right up next to one another, so that again he has a way of adding extra items to the bunch of things I think the world contains: if the world contains a plurality of things then it is an indeterminate or unlimited plurality.

There is a line of thought at work here which also features in other Zenonian arguments about plurality: the idea that once we start considering the world as a plurality it will turn out that any "single" thing we care to think of is just a collection of other things. Now since common experience presents me with an array of things in space, it may seem intuitively obvious that the world contains a plurality of different things. But the arguments preserved in the Zenonian material at DK 29 B1 and B2 take advantage of the fact that it is surprisingly difficult to handle the views about spatial extension and divisibility which underlie this intuition. There is nothing surprising in recognizing that there are some things in the world which we can break into bits (china plates, wooden planks) and other things which resist our efforts at division (lumps of diamond, grains of sand). The reasons lie in facts about the constitution of different materials (diamond is harder than china) and human capacities (humans are better at breaking things into bits than jellyfish are). However it would, by contrast, be very surprising to suppose that

some extended things in the world *have* smaller bits, while others have none. It is very natural to think that *every* extended thing has at least two bits, each half the size of the original. For since it seems plain to common sense that some extended things *do* have bits it will look objectionably arbitrary to suppose that nevertheless some extended things *don't*. Why should it be at one size rather than another that the mere *possession* of smaller bits gives out?

How does Zeno extract problems from all this for the common sense idea that the world is a plurality of different things. He pushes the following question. If the world is a plurality, then what is it a plurality *of*? On the one hand, if everything that is extended is itself a collection of bits, then any unitary bit from which a collection is composed would have to be *un*extended, without any magnitude at all. As Simplicius reports it: "It has no magnitude since each of the many is the same as itself and one" (DK 29 B2.19–20). That gives Zeno one limb of the argument he is developing: "Thus if there are many things, it is necessary that they are … small …; so small as not to have magnitude" (DK 29 B1.10–12).

Even as a stand-alone conclusion this looks unsatisfactory. How could a world composed of things with no size ever come to contain extended things such as my table? Adding together two (or more) things with no magnitude will not produce something with magnitude. In fact Zeno relies on this last point to argue that things without magnitude couldn't exist, for since they would *add* nothing, they would *be* nothing (DK 29 B2.8–16). But if we respond by insisting that of course the things which go together to make up the world *do* have magnitude, then we open ourselves to the second limb of Zeno's overall argument. If they have magnitude, how big are they? Since anything with magnitude has bits which themselves have magnitude, it appears that anything with magnitude will have an infinite number of bits (although, as noted earlier, we will not be able to break it into all the bits it has): indeed will have an infinite number of *equal sized* bits, since it will have more bits than just two halves, and more than just four quarters, and more than just eight eighths, and more than just N nths for any N you like … However if one adds together an infinite number of bits each of which has an equal size, then the result is going to be infinitely large, so that it now seems that each of the things which make up the world is infinitely large. And not only is that conclusion also unsatisfactory in its own right, but Zeno can combine it with the first limb of his argument to generate what looks like a fatal contradiction: "Thus if there are many things, it is necessary that they are both small and large; so small as not to have magnitude, so large as to be unlimited" (DK 29 B1.10–12).

Here we have a conclusion of the form which Plato identified at the beginning of his dialogue *Parmenides* (127e), although we cannot know to what extent Simplicius has manipulated the Zenonian material available to him in order to bring it into line with the Platonic characterization.

Zeno III: arguments about motion

Aristotle reports four Zenonian arguments concerning motion, commonly known as the Dichotomy, the Achilles, the Flying Arrow and the Moving Rows.

The Dichotomy and the Achilles rely on essentially the same idea. Aristotle's summary of the Dichotomy is terse; he reports that it: "asserts the non-existence of motion on the ground that that which is in locomotion must arrive at the half-way stage before it arrives at the goal" (*Physics* 6.9 239b11–13, DK 29 A25).

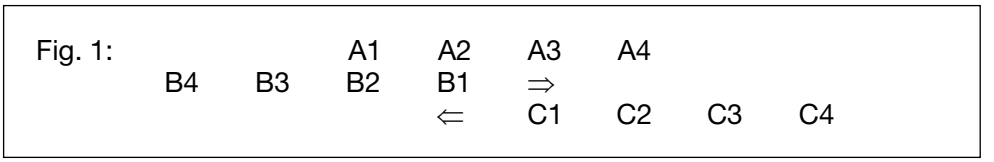
If something moves then it covers a distance in doing so. But it seems impossible that something should ever cover any arbitrary distance A–B. There are two ways of posing the problem (Aristotle's brief characterization allows for either). First, it is impossible that something should *finish* covering the distance A–B. For before it finishes covering A–B by arriving at B it first has to arrive at the point ½AB midway between A and B; and then at the point ¾AB midway between ½AB and B, and so on. If any distance contains two half-distances then there will be an infinite series of these midway points, and so an endless series of sub-journeys which something has to make in going from A to B before it arrives at its destination (the Achilles is essentially the same argument, except that we consider someone, Achilles, moving quickly towards a destination, a tortoise, which is moving away at a slower rate). Second, it is impossible for similar reasons that something should *start* covering the distance A–B. For before it gets to the point ½AB midway between A and B it has to get to ¼AB midway between A and ½AB, and so on. Again there seem to be an infinite series of these midway points, and so a beginningless series of sub-journeys which something has to make in order to get going from A to B.

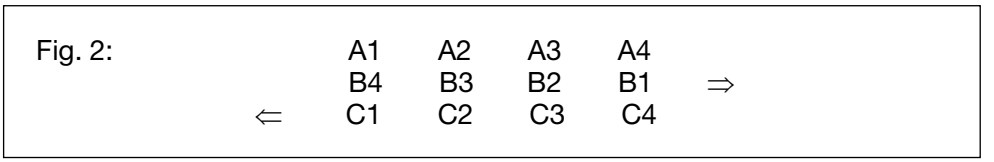
A rich variety of responses have been offered to this argument (see the collection of essays in Salmon 1970; also Sainsbury 1988: 5–24; Lowe 2002: 288–306). I will mention just one, which perhaps comes most immediately to mind. The Dichotomy relies on the assumption that any distance comprises two half distances. If that assumption were denied, the argument would lose its bite. Denying that assumption generates a strong form of spatial atomism, according to which there is a minimal distance D such that there just *is* no distance smaller than D. So once something gets to a point which is distance D away from its destination, it will not be true that it has to get to a point midway between there and its destination. There *is* no such midway point, since there are no distances smaller than the spatial minimum D. Now in order to avoid problems raised by variants of the Dichotomy, this response would also have to posit temporal atoms. For if it remained true that every temporal period were comprised of two smaller temporal periods then Zeno could ask how the *time* which something takes to cover the spatial atom could pass (since first half of it would have to pass, and then three quarters, and then seven eighths, and so on; Aristotle mentions this variant of the Dichotomy at *Physics* 8.8, 263a15–23). On a view like this motion would not be smooth and continuous, but more like an array of pixels on a computer screen flashing on and off for fixed periods of time, and presenting the illusion of continuity. (An atomist theory like this would also be relevant to the Zenonian arguments about plurality discussed in the preceding section.) There is debate among scholars about the history of this sort of spatio-temporal atomism (see Sorabji 1983 for a thorough treatment). I mention the view here only because it is thought by some to be relevant to another of Zeno's arguments about motion: the Moving Rows.

Once again Aristotle's report is highly compressed:

> The fourth argument is that concerning equal bodies which move alongside equal bodies in the stadium from opposite directions—the one from the end of the stadium, the others from the middle—at equal speeds, in which [Zeno] thinks it follows that half the time is equal to its double.
>
> *Physics* 6.9, 329b33–240a1 = DK 29 A28

Alexander of Aphrodisias, an Aristotelian commentator of the third century AD, provided a diagram in order to clarify the argument (DK 29 A28).





The As, Bs and Cs are equal sized bodies. The As are stationary, the Bs and Cs moving at equal speeds in opposite directions. Fig. 1 and Fig. 2 show how the positions of the bodies change over the time that it takes B1 to go past two of the As (that is, to move from being opposite A2 to being opposite A4).

How do these diagrams suggest that "half the time is equal to its double"? Aristotle, who is deeply unimpressed by this argument, says that Zeno relies on the false assumption that something moving takes the same time to pass two bodies of the same size, even if one of those bodies is stationary and one is moving. If the argument does rely on that assumption, then it may proceed as follows. Suppose the time it takes B1 to move from its Fig. 1 position to its Fig. 2 position is *t*. During that time B1 passes two of the As. The Cs are the same size as the As. So, given the assumption Aristotle identifies, it should take twice as long for B1 to pass four of the Cs as it does to pass two of the As: namely 2 *t*. But it is clear from examining the diagrams that the interval between the arrangements in Fig. 1 and Fig. 2 represents *both* the time it takes B1 to pass two As (namely *t*) *and* the time it takes B1 to pass four Cs (which, given the assumption Aristotle identifies, is 2 *t*). The deliberately paradoxical 'half the time is equal to its double' states the unwelcome conclusion that $t = 2t$.

Some commentators, however, have sought a more charitable interpretation of the Moving Rows. There are two options. According to both, Zeno is trading on, rather than being muddled about, the fact that something moves more rapidly past a moving object than one which is stationary. The first possibility is that Zeno is arguing that the relativity of velocity calls into question the reality of motion. After all, if something is moving then it must be moving at some velocity or other. But if the velocity at which one thing moves depends on facts about the motion of other things, then it might seem that whether or not something is moving is not really a fact about *it*.

The second possibility is that Aristotle has omitted a crucial fact: that the argument is aimed at the view mentioned earlier, which adopts a strong spatio-temporal atomism in order to evade the Dichotomy argument (see Owen 1957 for this approach). Suppose the As, Bs and Cs are atomic bodies. In that case the relativity of velocity forces an embarrassing question: how many As does B1 pass in the time taken for it to get from being opposite C1 to being opposite C2? The commonsense answer would be "half an A," since the As are stationary, while the Cs are moving, relative to the Bs. But that answer is ruled out, because since the As are of atomic magnitude there just is no such size as "half an A" (if there were we would be back to the Dichotomy). And it would hardly be an appealing response to deny that B1 ever does move from being opposite C1

to being opposite C2, since it will then be wholly unclear how B1 could have got from the left of C1 (opposite A2 in Fig. 1) to the right of C1 (opposite A4 in Fig. 2).

The final Zenonian argument about motion reported by Aristotle is the Flying Arrow:

> Zeno's reasoning, however, is fallacious, when he says that if everything when it occupies an equal space is at rest, and if that which is locomotion is always in a now, the flying arrow is therefore motionless
>
> *Physics* 6.9, 239b5–7 = DK 29 A27

Imagine an arrow which is fired in the (very late) morning and hits its target in the (very early) afternoon. Consider how it is with the arrow at the un-extended instant twelve noon. At twelve noon the arrow will just be occupying an arrow-shaped area of space. But surely, Zeno will say, something occupying a space exactly its own size and shape is at rest (as we might put it: it is *in* that space). So the arrow is at rest at twelve noon. But what goes for twelve noon goes for any other instant we care to pick between its being fired and its hitting the target. So the arrow is at rest at every instant between having been fired and hitting the target, in which case the 'moving arrow' is really at rest.

This argument goes in two main stages. First a claim is alleged to hold concerning the arrow at any arbitrary instant during its flight. Second on the basis of that claim a conclusion is drawn about the arrow during its entire "flight." Consequently there will at least two strategies which could be adopted in responding to the argument.

According to the first part of the argument, the arrow is at rest at noon. One might hold, however, as Aristotle did, that the concepts of motion and rest are correlates (*Physics* 6.3, 234a31–34): since motion is possible only over a period of time (because motion involves covering distance), rest would also be possible only over a period of time (because being at rest involves remaining in the same place for some period of time). That response to the argument, however, incurs weighty conceptual costs: the denial of motion and velocity at an instant put Aristotelian physics at a considerable disadvantage once those notions had been explicated by Newtonian science, and presumably this response by itself would not satisfy Zeno anyway. For if it is true that an arrow is neither in motion nor at rest at an instant then at any arbitrary instant it is true that the arrow is *not moving*. So, if the inference from what holds at any arbitrary instant contained within a period of time to what holds throughout the period of time remains unchallenged, Zeno will still be able to conclude that throughout its "flight" the arrow is *not moving*: and the situation seems more, rather than less, paradoxical if we point out that at least it *isn't at rest* either.

So some response is required to the second stage of the argument as well. Aristotle's report of Zeno's Arrow argument is followed immediately by his diagnosis of its main flaw:

> This is false; for time is not composed of indivisible nows any more than any other magnitude is composed of indivisibles.
>
> *Physics* 6.9, 239b8–9

The broad reference here is to Aristotle's general analysis of continuity. We cannot think of periods of time, such as the extended lunch break, as built up from instants like twelve noon *and the one after it* etc. The trouble is that there is no *one after it*. It's obvi-

ously not 12.01, since a more accurate clock could have displayed 12.005; and thinking of a series of more accurate clocks, each recording an instant closer to twelve noon than could be recorded by a less accurate clock, shows very clearly that there *is no such instant* (recall the Dichotomy argument: similarly, there *is no first place* the runner is at after he's set off at noon—if there were, that's where he would be at the first instant after noon, were there such an instant). But if instants/points/indivisibles aren't blocks from which periods/lines/extended-items are built up, then why should *anything* follow about something's period of flight from claims about an arbitrary instant, say twelve noon. No geometrical point within the view from my window could possibly have a color (which color? what would be the difference between points with different colours?); but why should anything follow about the green bushes and trees I can so obviously see? As with being colored, so with moving.

It is important not to focus Zeno's original argument too sharply by viewing it through the lens of Aristotle's sophisticated analysis of continuity. We moderns have an abundance of ways of referring to non-extended points of time: we have the word *instant*, and a rich vocabulary for picking different instants out—*twelve noon*, 12.00, 12.0000, *t* etc. But Aristotle is breaking new ground in his thinking about space, time, motion, and so on. He is creating a physics, and is reliant for his vocabulary on ordinary Greek language. One of the words which occurs in Aristotle's statement of Zeno's argument is the common Greek adverb *nun*: just as familiar and just as nuanced in its use as the English *now*. We cannot know how Zeno originally stated his Flying Arrow. Maybe he had a crisp statement, in the terse style of the limited/unlimited argument, which Simplicius claims to reproduce "in Zeno's own very words" (DK 29 B3; see discussion in the preceding section of this chapter). But it is equally likely that Zeno had a varied repertoire of carefully tuned statements of his arguments. If Zeno's purpose really was to defend Parmenides' claims from *ridicule* then one can imagine rhetorically effective statements of the Flying Arrow trading on the following three facts: that arrows move quickly, that "now" refers to the *present* and that "now" refers *indexically* (the time *to* which a particular use of "now" refers depends on the time *of* that particular use). Anyone standing watching archery might think it amusing to say to Zeno: "so much for Parmenides' *changeless* then?" Suppose Zeno should say: "is *that* arrow moving *now*?" By the time of the obvious reply—"yes, of course"—Zeno is doubtless in a position to say that, no, *that* one is now stationary in the target. Staring even harder at the next arrow fired is just going to invite more difficult questions, and is all too easy to see how someone could be maneuvered into an exasperated outburst of "all right, it's not moving *right now*." There remain difficult issues raised by Zeno's Flying Arrow argument which are not resolved by Aristotle's wonderful analysis of continuity (see Lear 1981, Le Poidevin 2002).

Melissus

Melissus has traditionally been thought the least impressive of the Parmenidean trinity. Aristotle judged him a much poorer philosopher than Parmenides (*Physics* 1.2, 185b10–12). Melissus argues for a broadly Parmenidean view of reality (although—intriguingly—he also had a considerable military reputation as an admiral; DK 30 A3), but he is no mere follower. We can identify three ways in which Melissus develops the Eleatic outlook beyond what is presented in Parmenides' poem.

First, Melissus writes in a style far more accessible than that of Parmenides. The fragments preserved (once again) by Simplicius are in a terse, plain prose style, and

Simplicius says that "Melissus wrote in an archaic style but not unclearly" (*in Phys*.111.15–16). In addition to the preservation of some original Melissan material, we have two paraphrases of Melissus' overall line of argument, both of which set out his thought in an extended deductive structure: one paraphrase is due to Simplicius, another is found in the pseudo-Aristotelian *On Melissus, Xenophanes and Gorgias* which some scholars have dated to the second century AD (see Mansfeld 1988).

Second, there are some areas in which Melissus makes Parmenides' ideas clearer and more determinate. Parmenides' views on time, for example, are nigh on impenetrable:

> it never was nor will be, since it is now, all together, one, continuous
>
> DK 28 B8.5–6

> And how could what is be in the future? How could it come to be? For if it came into being, it is not: nor is it if it is ever going to be in the future.
>
> DK 28 B8.19–20

It is utterly opaque whether Parmenides is thinking of reality as eternal, or as condensed into a unique present, or as timeless (see Schofield 1970, Matten 1986). Melissus, by contrast, at least stakes out a clear view, holding that reality is extended without limit both in time and in space (see DK 30 B2–4; however, it is sometimes unclear in particular passages whether Melissus is arguing for the unlimitedness of time, or for the unlimitedness of space, or indifferently for either).

Third, in some cases Melissus offers innovative support for views where Parmenides' own arguments had been difficult and allusive. Parmenides thought that the true nature of reality allows for no change or motion. But his precise argument is dense:

> But changeless within the limits of great bonds it exists without beginning or ceasing, since coming to be and perishing have wandered very far away, and true conviction has thrust them off. Remaining the same and in the same place it lies on its own and thus fixed it will remain. For strong Necessity holds it within the bonds of a limit, which keeps it in on every side.
>
> DK 28 B8.26–31

Contrast the following from Melissus:

> And nothing of it is empty. For what is empty is nothing. Well, what is nothing could not very well exist. Nor does it move. For it cannot give way at any point, but is full. For if there were such a thing as empty it would give way into what was empty; but since there is no such thing as empty, it has nowhere to give way.
>
> DK 30 B7.7

Here we have an early statement of the very influential idea that motion requires empty space for things to move into, with Melissus arguing that since empty space would be nothing, and nothing does not exist, then it is impossible for anything to move.

It would be a mistake, though, to think that Melissus presents just a more straightforward and accessible version of Parmenides' 'weird and wonderful' account of reality. As we have seen, Melissus does sometimes argue fairly straightforwardly for central claims

of Parmenides' poem. Other cases, however, are less clear. We have noted earlier that there is scholarly debate about the depth and nature of Parmenides' commitment to monism. By contrast, there is no such debate about Melissus, who argues explicitly that reality is a unique and undifferentiated whole (DK 30 B2: what is real is unlimited in both time and space; therefore DK 30 B6: there can only be one real thing, since if there were two they would limit one another; therefore DK 30 A5: what is real exhibits no variety, since difference would lead to plurality—there would be *one* thing qualified in one way and *a different* thing qualified differently). Melissus also introduces mysterious ideas of his own, whose import is not easy to understand: he argues, for example, that what is real suffers neither pain nor anguish (DK 30 B7.4–5, 16–23). And even the seemingly straightforward Melissan claims that what is real is unlimited in time and space, and full, need to be balanced against a report from Simplicius that Melissus argued that what is real is incorporeal:

> That [Melissus] wants what exists to be incorporeal he makes clear when he says: "If, then, it were, it must be one; and being one, it must not have body. But if it had solidity, it would have parts, and be no longer one."
>
> DK 30 B9

Finally the material preserved by Simplicius suggests that Melissus himself recognized a difference between the deductively transparent arguments, resting on Parmenidean hostility to what-is-not, and a more indirect argument aimed at those of his opponents who persisted in placing their confidence in the evidence of sense perception rather than thought—despite Parmenides' insistence that one judge by argument, in the face of Zeno's diagnoses of logical trouble in the common sense outlook, and unpersuaded by Melissus' own plain and direct arguments (DK 30 B8; for further discussion see Makin 2005).

References and further reading

The standard collection of Presocratic fragments and testimonia is the three volume *Die Fragmente der Vorsokratiker* edited by H. Diels and W. Kranz (6th edition, Weidmann, Zurich, 1952). References in the form "DK 28 B2"are to Diels-Kranz (the first number is the chapter: 28 Parmenides, 29 Zeno, 30 Melissus; "B" indicates a fragment, "A" would indicate a doxographical report).

The Diels-Kranz volume does not include any English translation. I have relied on the classic collection *The Presocratic Philosophers* by G. S. Kirk, J. E. Raven and M. Schofield (2nd edition: Cambridge University Press, 1983) = KRS.

An alternative to Diels-Kranz is *The Texts of Early Greek Philosophy: The Complete Fragments and Selected Testimonies of the Major Presocratics* edited with translation and comments by Daniel Graham (two volumes, Cambridge University Press, 2010)

Barnes, J. (1979), "Parmenides and the Eleatic One", *Archiv für Geschichte der Philosophie* 61: 1–21
Barnes, J. (1982), *The Presocratic Philosophers* (revised single volume edition), London: Routledge
Curd, P. (1991), "Parmenidean Monism", *Phronesis* 36: 241–264
Curd, P. (1998), *The Legacy of Parmenides*, Princeton, NJ: Princeton University Press
Furth, M. (1974), "Elements of Eleatic Ontology", in A. Mourelatos (ed.) *The Pre-Socratics*, Garden City, NY: Anchor: 241–70
Le Poidevin, R. (2002), "Zeno's Arrow and the Significance of the Present", in C. Callander (ed.) *Time, Reality and Experience*, Cambridge: Cambridge University Press: 57–72
Lear, J. (1981), "A Note on Zeno's Arrow", *Phronesis* 26: 91–104

Lowe, E. J. (2002), *A Survey of Metaphysics*, Oxford: Oxford University Press
Makin, S. (2005), "Melissus and His Opponents: The Argument of DK 30 B 8", *Phronesis* 50: 263–288
Mansfeld, J. (1988), "De Melisso Xenophane Gorgia: Pyrrhonizing Aristotelianism", *Rheinisches Museum der Philologie* 131: 239–276
Matthen, M. (1986), "A Note on Parmenides Denial of Past and Future", *Dialogue* 25: 553–557
Owen, G. E. L. (1957), "Zeno and the Mathematicians", *Proceedings of the Aristotelian Society* 58: 199–222; reprinted in Owen 1986:45–61
Owen, G. E. L. (1960), "Eleatic Questions", *Classical Quarterly* 10: 84–102; reprinted in Owen 1986: 3–26
Owen, G. E. L. (1986), *Logic, Science and Dialectic: Collected Papers in Greek Philosophy*, ed. M. Nussbaum, London: Duckworth
Palmer, J. (2004), "Melissus and Parmenides", *Oxford Studies in Ancient Philosophy* 26: 19–54
Palmer, J. (2009), *Parmenides and Presocratic Philosophy*, Oxford: Oxford University Press
Sainsbury, M. (1988), *Paradoxes*, Cambridge: Cambridge University Press
Salmon, W. (1970), *Zeno's Paradoxes*, Indianapolis: Bobbs-Merrill; republished Hackett 2001
Schofield, M. (1970), "Did Parmenides Discover Eternity?", *Archiv für Geschichte der Philosophie* 52: 113–135
Solmsen, F. (1971), "The Tradition about Zeno of Elea Re-examined", *Phronesis* 16: 116–141
Sorabji, R. (1983), *Time, Creation and the Continuum*, London: Duckworth
Vlastos, G (1975), "Plato's Testimony Concerning Zeno of Elea", *Journal of Hellenic Studies* 95: 136–163

Related chapters

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4
ANAXAGORAS AND EMPEDOCLES IN THE SHADOW OF ELEA

John E. Sisko

Anaxagoras of Clazomenae (500–428 BC) and Empedocles of Acragas (492–432 BC) each developed a robust account of the natural world during the generation subsequent to that in which Parmenides of Elea (515–450 BC) had proffered his own metaphysically provocative account of reality. Anaxagoras and Empedocles shared a bold approach to cosmological speculation. The two were interested in accounting for the nature and number of rudimentary types of matter: each was a pluralist, affirming that there is a variety of these rudimentary types. Furthermore, they were interested in explaining how organisms and material compounds (or non-rudimentary types of matter) come to be formed: each thought that mixture and interplay among rudimentary types of matter causes the generation of non-rudimentary things. In addition, the two were keenly interested in explaining the formation and structure of the cosmos: each thought that some cause, existing independently from matter, initiates motion and change in an otherwise static universe and thereby brings about the development of our world.

Anaxagoras and Empedocles were the first cosmologists to develop theories that were informed by Parmenides' philosophy, although Zeno of Elea (495–430 BC) is likely to have written earlier than Anaxagoras and Empedocles. He advanced dialectical arguments against motion and plurality. Zeno's chief motivation was to provide an indirect defense of Parmenides' philosophy, but he was not interested in cosmology. On the one hand, Anaxagoras' and Empedocles' theories share features that resonate with aspects of Parmenides' account of reality. Most conspicuously, both Anaxagoras and Empedocles affirm that no existent thing can either come to be from nothing or perish into nothing (DK 59 B17; DK 31 B12). This principle is axiomatic within Parmenides' philosophy (DK 28 B12). On the other hand, it is thought that their theories share features that are not prefigured in Parmenides' philosophy. (For example, Anaxagoras and Empedocles were pluralists, while Parmenides seems to have been a monist.) Also, later pre-Socratic philosophers, who were eager to respond to Parmenides, rejected tenets that are found in both Anaxagoras' and Empedocles' account. For example, both Anaxagoras and Empedocles affirm that universe is a plenum (DK 59 B8; DK 31 B14), while Democritus of Abdera (450–360 BC) and Diogenes of Apollonia (*flourit* 440 BC) posit the existence of void (DK 67 A16; DK 64 A1). However, these later thinkers studied Parmenides' philosophy through the lens of the radical and merely quasi-Parmenidean theory developed

by Melissus of Samos (*flourit* 450 BC). So, they responded to a version of Parmenides' philosophy filtered by Melissan concerns (Graham 2006: 251; Palmer 2009: 215). Some contend that the chronology is uncertain and Melissus could have influenced Anaxagoras and Empedocles (Warren 2007: 114–115). Anaxagoras and Empedocles advanced kindred accounts, based on kindred understandings of Parmenides' philosophy. Thus, by examining their theories in conjunction with Parmenides' poem, we shall not only come to appreciate their contributions to the development of Greek thought, but we shall also gain insight into the earliest reception of Parmenides' philosophy.

Anaxagoras and Empedocles labored in the shadow of Elea: to some extent, they shaped their own views in response to Parmenides. Yet modern scholars do not agree over the precise nature of their response. Given the incomplete state of the textual evidence and the obscurity of some of the extant material, it is difficult to interpret these philosophers. (The surviving fragments from these three authors total less than one-third of their original collective output (Gallop 1984: 5; Sider 2005: 14–15; Trépanier 2004: 26).) There are three prominent modern interpretations of Parmenides' philosophy and, since research on Anaxagoras and Empedocles has generally been oriented toward the goal of confirming one or another assessment of Parmenides' philosophy, each of the prominent interpretations incorporates a distinct stance on the question of Anaxagoras' and Empedocles' response to Parmenides. The prominent interpretations are not entirely successful in explaining the relationship between specific parts of Parmenides' poem. Furthermore, these interpretations face difficulties in reconciling their respective stances on Anaxagoras' and Empedocles' response to Parmenides with the textual evidence concerning these post-Parmenideans' views on physics and cosmology. We shall show that Anaxagoras' and Empedocles' shared response to Parmenides' poem cannot be reconciled with two of the three prominent modern interpretations. In addition, we shall suggest that, while Anaxagoras' and Empedocles' response does not appear to be discordant with one of the prominent interpretations, common elements within their theories suggest that their perspective on Parmenides might constitute a fourth alternative for assessing his philosophy.

Parmenides

Parmenides' poem is written in dactylic hexameter (the meter used in Homer's *Iliad* and *Odyssey*) and is divided into three sections. In the proem, a young man (most likely Parmenides himself) is guided to the underworld, where he meets a goddess. The goddess is Parmenides' philosophical authority: she reveals truth to her pupil. The goddess does not merely announce her views, however. Instead, she defends them with deductive argument. In the proem, the goddess promises to provide two accounts: one dealing with what is real and another dealing with what is believed.

In the second section of the poem, the *Way of Truth*, the goddess offers the promised account of what is real. She contends that what exists is "ungenerated and imperishable, entire, unique, unmoved, and perfect" (DK 28 B8.3–4; cf. B2) and she claims, "it is all alike and not any more in degrees in some respect, which might keep it from uniting, or any inferior, but it is all full of Being … for it is not defective, whereas Not-being would lack everything" (B8.23–32). The goddess maintains that what exists is uniformly replete with being and bereft of any apparent differences. She also claims that what exists "is in a state of perfection from every viewpoint, like the volume of a spherical ball, and equally poised in every direction from its center … it is equal with itself

from every view" (B8.44–49). In this rather obscure passage, the goddess either affirms that what exists is a sphere, or affirms that what exists possesses equipoise (in a manner analogous to the balance of a sphere). Throughout her account of reality, the goddess insists that what exists is homogeneous, motionless, ungenerated, and deathless.

In the third section of the poem, the *Way of Opinion*, the goddess takes up mortal opinion and offers an account of the natural world. She identifies Light and Night as rudimentary types of matter, affirming that Light is diffuse and mild, while Night is dense and heavy (B8.55–59). In addition, she states, "all is full of Light and invisible Night together, both of them equal, since in neither is there nothing" (B9.3–4). Thus, the goddess seems to hold that Light and Night are qualitative opposites, which together occupy all space. She teaches the youth about the formation of the Earth and moon. The goddess also teaches the youth about the arrangement of certain rings, filled with Light and Night, which occupy the periphery of the geocentric cosmos. In addition, the youth is told that a lone divinity is responsible for change in the natural world. Parmenides writes:

> For the narrower rings became filled with unmixed fire and those over them with night, in which moves a proportion of flame. In the midst of these is the divinity who governs all things. For everywhere she initiates hateful birth and union …
>
> (B12.1–5)

The governing divinity is the chief god in Parmenides' theogony (B13). The goddess goes on to declare that her own account of the natural world is both a "deceptive composition" (B8.51) and "likely in its entirety" (B8.60). Finally, addressing the youth, she affirms, "this order of things I declare to you … [so that] never shall any mortal outstrip you in practical judgment" (B8.60–61). Thus, while the goddess has reservations (which, perhaps, are not fully explained), she insists that her own cosmology is superior to all others.

Three Prominent Interpretations of Parmenides

In the *Way of Truth*, the goddess affirms that what exists is unitary, unchanging, and perfect. Consequently, scholars agree that Parmenides advocates some sort of monism. Yet, they do not agree over the specific kind of monism: some believe that Parmenides argues for Numerical Monism (a token monism of things); others think that he favors Generous Monism (a token monism of things of a specific type); and others contend that he supports Predicational Monism (a type of monism of the nature of things).

According to the first prominent interpretation, Parmenides is a Numerical Monist. He thinks that only one thing (a single item) exists (Guthrie 1965; Furth 1974; Gallop 1984; McKirahan 1994; Sedley 1999; Coxon 2009: 20–22; Wedin 2011; Makin, this volume). Since Parmenides affirms that what exists lacks any differences, it is thought that he rules out the possibility of there being a plurality of things. (For, in a plurality, each thing is different, in some way, from any other thing.) Furthermore, since he claims that what exists is both unchanging and replete with being, it is thought that Parmenides considers the single existing thing to be a static and homogeneous mass. This purportedly unitary mass is sometimes called the "One." While most agree that, at the phenomenal level, the "One" is homogeneous, some argue that, at deeper levels

of analysis, it is predicationally saturated (Furth 1974: 267–268), while others suggest that it predicationally simple, being wholly uniform at all levels of analysis (Curd 1991: 242n.7). On the former view, the "One" possesses all possible predicates, from among relevant types, throughout itself. On this approach, Parmenides focuses on quality-things (like *hot* and *bright*) and mass-terms (like *fire* and *earth*), and he considers such predicates to be conceptually independent of one another. So, he thinks that, since the *hot* is independent of the *not-cold* and the *cold* is independent of the *not-hot*, the "One," being both *hot* and *cold*, is neither *not-hot* nor *not-cold* (Sisko 2003: 94–95). On the latter view, little more than *existence* can be predicated of the "One." Further, some believe that the "One" is literally spherical (Sedley 1999: 17), while others argue that it is infinitely extended (and, thus, possesses equipoise, being equally balanced about itself at every location) (Gallop 1984: 19–21; McKirahan 1994: 172–173; Sisko 2003: 92–93).

If Parmenides advocates numerical monism, then he must reject the very possibility of natural science: change and difference are anathema to numerical monism. Consequently, defenders of the interpretation place significant weight on the goddess' claim that the account in the *Way of Opinio*n is a "deceptive composition" (B8.51). On this interpretation, the goddess holds that the cosmology of Light and Night is an abject falsehood: one which she presents to the youth only so that the youth might outdo all other mortals in the benighted contest of seeking to explain the world of appearance (Long 1963: 91).

The comprehensive devaluation of the goddess' account of the natural world is by far the least appealing aspect of the interpretation. The goddess seems to hold a more nuanced attitude toward natural science than the interpretation suggests. She does not affirm that her own theory is false. She merely suggests that the subject matter of natural science is less reliable and (perhaps) less accessible than the subject matter that is discussed in the *Way of Truth*. Also, since the *Way of Opinion* comprises about four-fifths of Parmenides' original poem and since (as numerous ancient sources attest) Parmenides discusses an impressively wide range of scientific topics, it is difficult to believe that Parmenides views the project of natural science as a wholly bankrupt enterprise (Palmer 2009: 160–161).

According to the second interpretation, Parmenides is a Generous Monist. He does not think that just one thing exists, rather he thinks that just one thing *of a specific type* exists: he thinks that there is only one necessary being (Palmer 2009). The characteristics that are said to belong to the necessary being, under this interpretation, are largely the same characteristics that are assigned to the "One," under the first interpretation. The necessary being is static, perfect, ungenerated, and deathless. It is a uniform mass and it is replete with being. The proposed monism, unlike its numerical counterpart, is "generous," because it does not preclude the existence of contingent (non-necessary) beings. On this interpretation, the cosmos of the *Way of Opinion* is said to exist co-temporally and co-extensively with the lone necessary being.

If Parmenides advocates generous monism, he faces a significant problem: the problem of co-presence. Parmenides' necessary being occupies space: it is replete with being and so, arguably, it precludes the intrusion of any other being within its spatial territory. Furthermore since, in the *Way of Opinion*, the goddess states, "all is full of Light and invisible Night together" (B9.3), it seems that the cosmos precludes the intrusion of anything other than Light and Night within its spatial territory. Yet, on this interpretation, the necessary being and the cosmos are taken to exist together throughout all of physical reality. Thus, paradoxically, the interpretation suggests that the necessary

being and the cosmos are both co-present and mutually incompatible. (Some argue that Parmenides faces a less robust, and potentially manageable, version of the problem of co-presence (Palmer 2009: 180–188)). If Parmenides is a generous monist, then he must show how co-presence is possible within the context of apparent mutual incompatibility. Unfortunately, there is no evidence that Parmenides is even aware of the problem of co-presence.

According to the third prominent interpretation, Parmenides is a Predicational Monist. On this view, Parmenides, in the *Way of Truth*, assesses the meta-theoretical requirements for the existence of any fundamental object (Curd 2004). He does not affirm that only one token object exists, rather he contends that each and every fundamental object (whatever the number) must be ungenerated, deathless, uniform and unchanging: each fundamental object must be a predicational monad, possessing one essential nature uniformly throughout itself. On this interpretation, Parmenides affirms that tokens of any fundamental type must be pure, undifferentiated, and indestructible instantiations of their type. In addition, on this view, Parmenides aims to incorporate the meta-theoretical requirements, developed in the *Way of Truth*, within the physical theory that he advances in the *Way of Opinion*. Light and Night are fundamental types and so, it is argued, every token of Light or Night is, for Parmenides, a pure and unchanging instantiation of its own type.

If Parmenides advocates predicational monism, it is difficult to understand why the goddess should assert that her own account of the natural world is a "deceptive composition" (B8.51). If the goddess' cosmology follows the principles that are established in the *Way of Truth*, then, on theoretical grounds, her account should be viewed as non-deceptive. In defense of the interpretation, some contend that Parmenides violates the principles of predicational monism by defining Light and Night as strict qualitative opposites and so he effectively pollutes his own cosmology with irreducible references to differences (Curd 2004: 107–100). This defense, however, is not ideal as it requires us to accept that Parmenides intentionally offers a theory that he himself judges to be corrupt, and this does not cohere well with the goddess' insinuation that her own account is superior to all others.

Each of the prominent interpretations includes a proprietary stance on Anaxagoras' and Empedocles' shared response to Parmenides. (It is agreed that Anaxagoras and Empedocles are pluralists; they posit motion; and they accept some variant of Parmenides' prohibition against generation and destruction. Further, it is agreed that neither offers a direct criticism of Parmenides' philosophy.) Those who suppose that Parmenides is a numerical monist affirm that Anaxagoras and Empedocles posit pluralism and motion in order to rescue the world of appearance from the clutches of Parmenides' stultifying monism. On this view, Anaxagoras and Empedocles are fully aware that Parmenides' arguments in the *Way of Truth* purport to show that a world of plurality and motion cannot exist. Nevertheless, positing plurality and motion, they simply beg the question against Parmenides. In addition, they re-appropriate Parmenides' prohibition against generation and destruction, proposing that all tokens of rudimentary matter are ungenerated and indestructible.

Those who suppose that Parmenides is a generous monist affirm that Anaxagoras and Empedocles understand that the theory advanced in the *Way of Truth* does not concern natural science and they take Parmenides, in the *Way of Opinion*, to be working squarely within the existing tradition of speculation in natural science. On this view, Anaxagoras and Empedocles develop their own theories without any perceived obligation either

to reject or to accept any part of Parmenides' philosophy. Importantly, they discern no Parmenidean basis for requiring tokens of rudimentary matter to be ungenerated and indestructible. Nevertheless, they cull specific features from Parmenides' account.

Those who suppose that Parmenides is a predicational monist assert that Anaxagoras and Empedocles accept the meta-theoretical requirements that are established in the *Way of Truth* and, discerning that the cosmology developed in the *Way of Opinion* fails to satisfy the demands of predicational monism, they seek to explain the natural world in ways that meet the requirements of predicational monism. Consequently, on this view, it is suggested that these post-Parmenideans employ Parmenides' prohibition against generation and destruction, while championing the notion that tokens of rudimentary matter are pure and undifferentiated.

Anaxagoras

Anaxagoras presents his philosophy in straightforward prose. He eschews Parmenides' heroic verse and reverts to the style of his fellow Ionians: Anaximander and Anaximenes. The overall impression is that Anaxagoras is a dispassionate intellectual, with no interest in grandstanding and no patience for unfounded superstition. (According to Plutarch, Anaxagoras inspired Pericles to overcome his own superstitions and embrace natural science (DK 59 A16).)

Anaxagoras has a complex and rigorously structured theory of the natural world. He postulates an expansive ontology, claiming that the rudimentary types of matter are "unlimited in number" (DK 59 B4b.5–6). Concerning basic kinds of matter, Anaxagoras states: "The Greeks do not think correctly about coming-to-be and passing-away; for no thing comes to be or passes away, but is mixed together and dissociated from the things that are" (B17.1–4). Thus, Anaxagoras employs (or re-appropriates) Parmenides' prohibition against generation and destruction. In the extant fragments, Anaxagoras does not offer a direct account of the shared characteristics of basic types of matter. Nevertheless, he identifies several types as rudimentary: he marks out flesh, hair, air, aether, earth, the hot and the cold, the wet and the dry, and water as basic. (Some contend that Anaxagoras provides a reductionist explanation of substances, affirming that only qualitative opposites (like hot and cold, and wet and dry) are fundamental within his system (Schofield 1980: 107–121; Palmer 2009: 256–259).) These material types share the characteristic of phenomenal homogeneity: each lacks the appearance of variegated structure. So, it is believed that Anaxagoras is committed to the idea that all rudimentary matter is non-variegated. Anaxagoras twice indicates that seeds are rudimentary types (B4a.2; B4b.5). Some suggest that the seeds are biological starting points (Curd 2007: 175; Sedley 2007: 18–19), while others suggest that they are homunculi of individual organisms (Lewis 2000). If either of these views is correct, Anaxagoras' seeds are heterogeneous and variegated. Aristotle's testimony, however, suggests that Anaxagoras uses 'seed' (*sperma*) as a technical term for describing any type of rudimentary matter (A43). So, following Aristotle, Anaxagoras' seeds are homogeneous and non-variegated. Anaxagoras does not consider organisms or structured artifacts to be among the basic kinds. Instead, these are temporary compounds, which are formed as the result of the interplay of rudimentary things.

Anaxagoras believes that the universe is an infinitely extended plenum and he holds that every spatial location in the universe contains some measure of each rudimentary type of matter. He states, "since the shares of the large and the small are equal in number,

in this way too, all things will be in everything; nor is it possible that [anything] be separate, but all things have a share of everything" (B6.1–3; cf. B1; B6; B12). This postulate has come to be called the principle of universal mixture. According to the principle, within—for example—a glass of water, there exists, not only water, but also flesh, hair, and earth, plus every other type of rudimentary matter. At first blush, universal mixture seems problematic; for one might wonder why the fluid in a glass of water both looks like water and tastes like water, when the glass contains every kind of rudimentary material constituent. Anaxagoras addresses this worry: he states, "each one is and was most manifestly those things of which there are the most in it" (B12.29–31). This postulate has come to be called the principle of predominance. According to the principle, water is water because it contains more water than anything else: phenomenal water is water because it contains a greater share of elemental water than of any other type of elemental matter. (The distinction between phenomenal matter and elemental matter, in reference to Anaxagoras' physics, is a relative distinction (Strang 1963). There is no such thing as pure elemental matter: while elemental matter exists below the level of perception, it, like phenomenal matter, is subject to the principle of universal mixture.) Anaxagoras' principle of predominance does not require that the measure of water in a glass of water be greater than the sum of the measures of all other basic types of matter in the glass. Rather, the principle requires only that the measure of water be greater than that of any other particular type of basic matter (Sisko 2005: 242). Since Anaxagoras posits the existence of an indefinite number of rudimentary types, the principle of predominance allows for the possibility that, in any given glass of water, there might be an especially minute share of water.

Anaxagoras claims that matter is subject to extraction and refinement: non-predominant matter of one type can be separated from a phenomenal mass, which is predominantly of another type, with the result that the extracted material becomes a phenomenal mass in its own right (a mass in which the once non-predominant type now predominates), while, within the original mass, the relative share of the material type that originally had been predominant is increased (and, so, that type continues to predominate). According to Anaxagoras, extraction is essential for nutrition: he suggests that growth occurs when flesh, which exists non-predominantly in our food (say, in a slice of bread), is extracted and combined with our existing flesh (B10; A64). One might wonder whether repeated extraction could lead to the isolation of a mass that is constituted solely of just one kind of rudimentary matter. If this were possible, then extraction would stand at odds with the principle of universal mixture. Anaxagoras, however, guards against the possibility: he insists that matter can be divided *ad infinitum*. Anaxagoras states, "nor is it possible that [anything] be separate, but all things have a share of everything. Since it is not possible that there is a least, it would not be possible that [anything] be separated, nor come to be by itself" (B6.3–6). Anaxagoras affirms that there is no smallest unit of matter and so, within any given mass, there always remains sufficient volume for the inclusion of shares of each and every type of rudimentary matter. Thus, according to Anaxagoras, extraction is consistent with universal mixture.

Ancient sources suggest that Anaxagoras posits a principle of homoeomereity. Aristotle states, "[Anaxagoras] makes the homoeomerous stuffs elements, for instance, bone and flesh and marrow and the other things of which the part is called by the same name [as the whole]" (A46). Aristotle suggests that Anaxagoras posits the principle of general homoeomereity. On this view, Anaxagoras affirms that any token of any type of matter is such that each of its spatially determined parts is the same in kind as the whole (Sisko

2009: 90–91). Yet, since there is no direct evidence in the extant fragments concerning a principle of homoeomereity and since it has been suggested that homoeomereity is not consistent with universal mixture, some argue that homoeomereity cannot be a legitimate part of Anaxagoras' theory (Cornford 1930: 14; McKirahan 1994: 208; Curd 2007: 148). Nevertheless, since homoeomereity concerns tokens and the spatial partitions of tokens, while universal mixture concerns ingredients but neither tokens nor their spatial partitions, homoeomereity is consistent with universal mixture (Kerferd 1974: 49; Sisko 2009: 93 n.11). Consider, for instance, a glass of water in which there is a thorough and uniform mix of every material kind, but also a predominant share of water. If the contents of the glass were partitioned into any number of units (and the relative share of each ingredient were to remain unchanged throughout), then each partition would be a thorough and uniform mixture of every material kind, with a predominant share of water. Further, owing to the principle of predominance, each partition would manifest itself as water. Thus, homoeomereity is consistent with universal mixture.

It has been suggested that homoeomereity stands at odds with extraction and refinement (Furley 2002: 121). In order for a body of one material type to be extracted from a mass in which another type of matter predominates, there must be a redistribution of matter such that the relative share of the first type comes to be predominant within a spatial sub-region of the original mass. Extraction would be impossible if Anaxagoras were to accept the principle of rigid compositional homoeomereity. According to this principle, any token of any type of matter is such that each of its spatially determined parts has the same proportional composition as the whole. Interpreters have typically not shown awareness of the distinction between rigid compositional homoeomereity and general homoeomereity. Nevertheless, Aristotle's testimony suggests that Anaxagoras accepts general homoeomereity rather than rigid compositional homoeomereity, and general homoeomereity allows for the redistributing of matter: general homoeomereity does not stand at odds with extraction and refinement (Sisko 2009: 97–98).

According to Anaxagoras, the universe is ungenerated and, in its original state, it is an infinitely extended and phenomenally homogeneous mass. Regarding this primordial soup, Anaxagoras states:

> All things were together, unlimited both in amount and in smallness, for the small too, was unlimited. And because all things were together, nothing was evident on account of smallness; for air and aether pervaded all things, both being unlimited, for these are the greatest among all things both in amount and in largeness.
>
> (B1)

The primordial soup is a motionless plenum. It is subject to universal mixture and thus it is predicationally saturated: all rudimentary types exist in every sub-region of the universe and, so, the universe is (non-phenomenally) flesh, hair, earth, and the like, at every location throughout itself (Sisko 2003: 101). Nevertheless, since air and aether jointly predominate throughout the primordial soup, the plenum is a phenomenally uniform and qualitatively indeterminate mass.

According to Anaxagoras, our cosmos comes to be formed owing to the instigation of rotary motion in the otherwise static plenum. This rotary motion is initiated by a force existing independently from matter: *nous*, or mind. Anaxagoras states:

> *Nous* controlled the whole revolution, so that the revolution would begin. And at first it began to revolve from a small area, but it is still revolving yet more, and it will revolve still more … and *nous* also ordered this revolution, in which the things now being separated off revolve, the stars and the sun and the moon and the air and aether.
>
> (B12.12–21)

The *nous*-caused rotation expands from a small area. It brings about a redistribution of matter and causes the relative share of different rudimentary kinds of matter to become predominant within localized areas. These types become manifest in those areas and, ultimately, our structured world takes shape, with heavy and moist matter at the center, and light and hot matter at the (ever expanding) periphery.

Anaxagoras affirms that the *nous*-caused rotation forms other worlds, in addition to our own. He states:

> Since these things are so, it is right to think that … there are cities that have been constructed by humans and works made, just as with us, and that there are a sun and a moon and other heavenly bodies for them, just as with us, and their earth grows many different things … I have said this about the separation off, because there would be separation off not only for us but also elsewhere.
>
> (B4a)

A host of interpretations of Anaxagoras' theory of multiple worlds have been suggested (Cornford 1934; Mansfeld 1980; Sisko 2003; Curd 2009: 212–222). While it is generally agreed that Anaxagoras' worlds exist co-temporally, there is no direct textual evidence that helps us to delimit the possible arrangement or relative sizes of these worlds (Sisko 2010b: 449–450).

Anaxagoras describes *nous* as a special substance. He claims that *nous* is not subject to the principle of physics: it, unlike rudimentary matter, is unmixed (B12.2). Further, Anaxagoras claims that *nous* "is the finest of all things and the purest" (B12.9–10). Many interpreters think that Anaxagoras' *nous* is an immaterial substance. (Some suggest that *nous* is a material substance (Barnes 1982: 406).) Some also claim that his *nous* is a purposive, planning cause: it is an intellect that knows future states of affairs and exercises forethought in order to bring about the results it desires (Sedley 2007: 22–25; Curd 2009: 194). Most interpreters, however, (including, importantly, Plato (*Phaedo*, 97d6–98c1)) contend that Anaxagoras' *nous* is not a planning cause, but is, instead, a blind source of motion (Sisko 2010a: 437–440). It is agreed that, according to Anaxagoras, *nous* is responsible for all change in the natural world. Without the initial *nous*-caused rotation, Anaxagoras' universe would remain a phenomenally homogeneous, predicationally saturated, and motionless mass.

Empedocles

Empedocles writes in dactylic hexameter, just like Parmenides. Furthermore, like Parmenides, he affirms that his philosophy is grounded in divine knowledge. However, Empedocles inverts Parmenides' teacher-pupil model and claims divine status for himself. He writes,

> O Friends, who dwell in the great city of yellow Acragas,
> …
> hail! I, in your eyes a deathless god, no longer mortal,
> go among all, honored, just as I seem:
> wreathed with ribbons and festive garland.
> (DK 31 B1.1–6)

Empedocles portrays himself as a god who brings philosophical insight to mortals, and is a charismatic healer and showman. He offers a complex demonology, in which he affirms that, as a demon (*daimōn*: divine thing), he had been exiled from a joyous realm for the crime of bloodshed (B115) and has since lived as a plant, a fish, a bird, and numerous humans (B177). Empedocles believes in reincarnation and he affirms that, through ritual purification, demons currently existing in human form can ultimately reach salvation and return from exile. Empedocles exhorts his fellow citizens to be vegetarians, since eating meat is a form of cannibalism (B137); he exhorts them to not harm laurel, since laurel is the highest form of plant life (B140); and he prohibits the eating of beans, although here his rationale eludes us (B141).

It had once been thought that Empedocles' *oeuvre* includes two poems: *On Nature* and *The Purifications*. (These titles are cited by Diogenes Laertius in the third century AD, but no earlier ancient authority suggests that Empedocles has more than one poem.) In the past, scholars, assuming Empedocles' natural science to be incompatible with his demonology, affirmed that Empedocles has two world-views (perhaps established at different times in his life) and these world-views are set out in two separate poems (Zeller 1889). Now, with the publication of the Strasburg papyrus (Martin and Primavesi 1999), it is clear that Empedocles has one worldview; for in *ensemble d* of the papyrus, he integrates his demonology with his physics (Trépanier 2004: 3–6). (Also, it is likely that Diogenes Laertius misconstrued a pair of alternative titles for a single poem as titles for two different poems. (Osborne 1987).) It is now generally agreed that Empedocles' demonology is meant to go hand-in-hand with his physics (Warren 2007: 137). While Empedocles' eschatology and demonology are certainly fascinating, they are the product of reflections on Orphic and Pythagorean themes, and have little (or nothing) to do with Parmenides' philosophy. Let us now consider Empedocles' physics and cosmology.

Empedocles, like Anaxagoras, thinks that there are a variety of rudimentary types of matter. Unlike Anaxagoras, however, Empedocles does not consider all homogeneous (or seemingly homogeneous) material types to be basic. Anaxagoras' core ontology is expansive, while Empedocles' is austere. Empedocles postulates just four basic kinds of matter, or roots (*rhizōmata*), earth, air, fire, and water, and he affirms that all other material types are compounds of these four roots (B6). He claims, for example, that bone is two parts earth, two parts water, and four parts fire:

> And pleasant earth in her well-built channels
> received two parts gleaming Nestis <water> out of the eight
> and four of Hephaistos <fire>; and they become white bones
> fitted together with the divine glues of harmony.
> (B96)

Empedocles' formula for bone suggests that he does not consider natural compounds to be homogeneous blends of constituent roots. If compounds were smooth blends, then

we would expect Empedocles to offer a simpler, but proportionally equivalent, formula for bone: one part earth, one part water, and two parts fire (each formula has a 1:1:2 ratio). Empedocles seems to think that compounds are spatially configured conglomerates in which the roots retain their distinct character (39A34, A43; Curd 2004:166–171). Given that his compounds are, at some level of analysis, variegated, Empedocles does not accept Anaxagoras' principle of general homoeomereity. Further, since he omits air from the list of ingredients in bone, Empedocles does not accept Anaxagoras' principle of universal mixture (Graham 2006: 217).

In response to the worry that his theory of rudimentary material types is too limited to account for a rich variety of (compound) material kinds and organisms, Empedocles offers an analogy to painters' use of pigment. He states:

> As when painters adorn votive offerings,
> men well-learned in their craft because of cunning,
> and so when they take in their hands many-colored pigments,
> mixing them in harmony, some more, others less,
> from them they prepare forms resembling things,
> making trees and men and women
> and beasts and birds and water-nourished fish
> and long-lived gods, first in their prerogative.
>
> (B23.1–8)

Empedocles suggests that, just as a small number of pigments can be employed by painters both to produce a broad variety of colors and to represent various types of matter and forms of life, so too a small number of elements can be used in nature, but to produce diverse kinds of matter and living things. Within the analogy, Empedocles supposes that there are two painters (he describes their activity, using a verb in the 'dual' form) and so he seems to suggest that, within nature, there are two agents of motion and change (Sedley 2007: 59; Warren 2007: 140). In other fragments, Empedocles identifies a pair of forces, Love and Strife, existing independently from the roots. These immaterial forces, unlike the roots, are not subject to the principles of physics. Love unites and mixes material kinds, while Strife separates them. Love and Strife also play roles in shaping the cosmos and in engendering life. Empedocles states,

> When Strife reaches the lowest depth
> of the eddy and Love gets into the middle of the whirl,
> there all these come together to be one alone,
> not suddenly, but voluntarily coming together, each from a different direction.
> And as they are being mixed ten thousand tribes of mortals pour forth;
> but many stood unmixed, alternating with those being blended,
> the ones that Strife above still held in check; for not yet has it blamelessly
> moved entirely out to the furthest limits of the circle,
> but some of the limbs remain within, and others had gone out.
> And as far as it [Strife] had at any stage run out ahead,
> so far did the immortal and kindly stream of blameless love then come
> forward.
>
> (B35.3–13)

Empedocles postulates a cosmic cycle. He affirms that, at one stage, the universe is in a privileged condition: under the dominion of Love, all that exists is a uniform and motionless sphere. (Empedocles' universe, unlike Anaxagoras,' is spherical.) Strife, advancing from the periphery, undoes this privileged condition, causing the four roots to surface and separate. Strife continues to segregate the four roots and ultimately, under its dominion, the universe is comprised of four concentrically nested masses (of fire, air, water, and earth). (Some contend that, within the cycle, there is no period in which the roots are fully segregated (Long 1974).) Love, then, advancing from the center, reasserts itself and begins mixing the roots. Ultimately, under the dominion of Love, the privileged uniform body is reconstituted (Graham 1988; Palmer 2009: 260–270). Empedocles' privileged body is sometimes called the "Sphairos" (or "sphere"). Empedocles' cosmic cycle lacks a temporal beginning and it reoccurs without end, cycling back to the 'Sphairos' every thirty thousand seasons (B115). (Empedocles, like Anaxagoras, posits the existence of multiple worlds. However, Empedocles' worlds, unlike Anaxagoras', are not co-temporal.)

Empedocles affirms that life is engendered within the cosmic cycle. Since the cycle is essentially two-fold, with a period of change during the ascendancy of Strife and another period of change during the ascendancy of Love, it is thought that Empedocles proposes a pair of zoogonic epochs. Regarding the development of life during the period of increasing Love, Empedocles states,

> as many heads without necks sprouted up
> and arms wandered naked, bereft of shoulders,
> and eyes roamed alone, impoverished of foreheads
> (B57)

and

> Many with two faces and two chests grew,
> oxlike with men's faces, and again there came up
> androids with ox-heads, mixed in one way from men
> and in another way in female form, outfitted with shadowy limbs.
> (B61)

Love brings different things together and, under its ascendancy, body parts emerge out of the Earth. These organs join to one another in chance congeries. Over time, some of the congeries prove to be fit for survival and these reproduce. (In limited ways, Empedocles anticipates Darwin (Sedley 2007: 43).) Each well-formed species is maintained until Love's drive toward unification (once again) obliterates all differences and quells motion within the universe. This is the zoogony of Love's ascendancy. While, in the extant fragments, Empedocles focuses on explaining the emergence of life in just one part of the cycle, he believes that we are now in the period of Strife's ascendancy (A42). So, it is likely that Empedocles offers a similar zoogony for this period. (It is debated whether he thinks that our zoogony advances in reverse order to the one that transpires during Love's ascendancy (O'Brien 1969: 164–168; Palmer 2009: 267).) Empedocles believes that Love and Strife are responsible for all change in the natural world. Nevertheless, these forces act in opposition to one another and Empedocles does not suggest that they are purposive, planning, causes. Life, according to Empedocles, is engendered by chance, not by intelligent planning.

Most interpreters consider Empedocles' roots to be ungenerated and deathless (Guthrie 1965:146; McKirahan 1994: 259; Inwood 2001: 31; Curd 2004: 159–160), but a few think that the roots are impermanent (Le Croce 1980/81: 116; Osborne 1987: 38–44; Palmer 2009: 279–298). The evidence, on balance, favors the latter view. Empedocles' statements concerning the roots and their role in the formation of material compounds suggest only that the roots are relatively more durable than compounds. While Empedocles affirms that compounds are temporary congeries of roots, he does not claim that the roots (taken either as tokens or as types) are either deathless or ungenerated. Instead, he says the opposite: he states, the roots "have no constant life" (B26.10) and they are "all of like age in their birth" (B17.27). Empedocles' roots are not permanent constituents of the universe. Nevertheless, the roots are unchanging in a qualified way: their patterns of change (generation and destruction) within the cosmic cycle never waver (B26.12).

Empedocles seems to think that, within each cosmic cycle, the roots are generated when Strife acts upon the "Sphairos" and they are destroyed when the "Sphairos" is reconstituted by Love (Osborne 1987: 41–42; Palmer 2009: 279–285). Empedocles affirms that, in the formation of the "Sphairos," the roots "all come together to be one alone" (B35.5) and "growing together as one they are totally submerged" (B26.7). At this stage in the cosmic cycle, the roots are subsumed and all differences are obliterated: plurality gives way to unity. Furthermore, Empedocles claims that when motion and differences are reintroduced in the universe the roots are "born apart separately by the hostility of Strife" (B26.6). At this stage in the cosmic cycle, unity gives way to plurality.

The "Sphairos" is a peculiar body. Empedocles claims that it is "altogether unlimited" (B28.1) and he affirms that it exists in "joyous solitude" (B28.2). The "Sphairos" lacks all qualitative and substantive differences: it is a phenomenally homogeneous, motionless, and unitary mass. Furthermore, unlike material compounds such as bone, which are homogeneous only at a surface level and yet are variegated at some deeper level, the "Sphairos" is homogeneous at every level of analysis. The "Sphairos" is predicationally simple: its nature is uniform and unblended. Without the agency of Strife, Empedocles' universe would remain a phenomenally homogeneous, predicationally simple, and motionless sphere.

Anaxagoras and Empedocles in Response to Parmenides

Anaxagoras and Empedocles advance similar theories. Each affirms that there is an initial, or privileged, period in which the whole of physical reality is motionless and phenomenally homogeneous; each contends that the universe would remain in this state, were it not for the agency of some cause existing independently from matter; and each claims that mixture and interplay among rudimentary kinds of matter engenders the formation of non-rudimentary things. In addition, neither Anaxagoras nor Empedocles thinks that tokens of rudimentary matter are both pure and immune from generation or destruction: according to Anaxagoras, rudimentary matter is impure and, according to Empedocles, rudimentary matter is generable and destructible. Furthermore, each posits the existence of multiple worlds. Nevertheless, these two post-Parmenideans do not agree on every issue. Importantly, they have different views concerning the physical extension and qualitative condition of the universe in its initial, or privileged, state. According to Anaxagoras, the primordial soup is infinitely extended and predicationally saturated, while, according to Empedocles, the "Sphairos" is a predicationally

simple sphere. In addition, Anaxagoras claims that there are an unlimited number of rudimentary types of matter, while Empedocles claims that there are just four basic types.

If Anaxagoras and Empedocles advance their theories in response to Parmenides, then it is quite unlikely that they consider Parmenides to be a predicational monist. For, if this were their perspective, we would expect Anaxagoras and Empedocles to rule out the generation and destruction of rudimentary matter and we would expect each to affirm that tokens of basic matter are pure and undifferentiated. Yet Empedocles claims that rudimentary matter is generable and destructible, while Anaxagoras affirms that every material token is impure. So, their shared response does not harmonize with the thesis that Parmenides is a predicational monist.

Whether Parmenides is a numerical monist or a generous monist, his alleged monad is motionless and phenomenally homogeneous. Also, on either interpretation, it is reasonable to consider Parmenides' monad both to be either a finite sphere or an infinitely extended expanse and to be either predicationally simple or predicationally saturated. According to Anaxagoras, the initial state of the universe is phenomenally homogeneous, motionless, infinitely extended, and predicationally saturated. Thus, Anaxagoras' primordial soup is a surrogate for Parmenides' monad, under one reasonable construal of the *Way of Truth* (Sisko 2003: 96–102). According to Empedocles, the privileged state of the universe is phenomenally homogeneous, motionless, spherical, and predicationally simple. Thus, Empedocles' "Sphairos" is a surrogate for Parmenides' monad, under another reasonable construal of the *Way of Truth* (Le Croce 1980/81: 116; Palmer 2009: 324–327). Both Anaxagoras and Empedocles contend that the world of change and plurality issues from Parmenides' monad.

In light of their shared supposition that the cosmos develops from Parmenides' monad, it is unlikely that Anaxagoras and Empedocles consider Parmenides to be a generous monist. For, if this were their view, we would expect them to understand that the monad is co-present with the cosmos and we would expect them to see the extreme theoretical incongruity of supposing that one of two *co-temporal* items develops *in time* from the other. So, their shared response to Parmenides does not harmonize with the thesis that Parmenides is a generous monist.

It is not implausible to suppose that Anaxagoras and Empedocles consider Parmenides to be a numerical monist. Typically, on this interpretation it is thought that these post-Parmenideans posit plurality and motion against the backdrop of Parmenides' monism: they accept certain Parmenidean principles, yet they blatantly ignore Parmenides' thesis that all that exists is the "One." The supposition that, if Parmenides were a numerical monist, then Anaxagoras and Empedocles could only be viewed as begging the question against him, has been regarded as a significant obstacle to accepting the thesis that Parmenides champions the "One" (Curd 2004: 130–131). Since, as we have now shown, however, Anaxagoras and Empedocles accept the (temporally limited or transient) existence of Parmenides' "One," it is possible to develop a more favorable construal of their response to Parmenides, under the rubric of this interpretation. On this construal, Anaxagoras and Empedocles strive to show how the natural world develops from the "One." While they do not offer direct arguments against Parmenides' (purported) surmise that the natural world cannot exist, these post-Parmenideans appear to circumvent specific proposals that are advanced in the *Way of Truth*. For example, on this interpretation, while Parmenides argues that there cannot be a temporally first event of change within the "One" and thus all change is impossible (DK 28 B8.9–10), Empedocles posits an eternal cycle in which there is no temporally first event. Further,

on this interpretation, while Parmenides contends that motion is impossible, because it would require the presence of void, while the 'One' is effectively a void-less plenum (B4), both Anaxagoras and Empedocles posit counter-circulatory motion within a void-less plenum (Barnes 1982: 399–402; Sisko 2003: 104–106). Finally, on this interpretation, while Parmenides' "One" is a material body that cannot act upon itself and thus remains motionless (B8.29–30), both Anaxagoras and Empedocles posit the existence of a force that acts upon the "One." Thus, it is credible to affirm that both Anaxagoras and Empedocles understand Parmenides to be a numerical monist, while each proposes a diachronic solution, aiming to wrest the natural world from the "One."

If we suppose that Parmenides is a numerical monist and both Anaxagoras and Empedocles interpret him as such, then we face two difficulties: first, the interpretation does not furnish a satisfactory explanation of Parmenides' interest in natural science. Second, it does not demarcate a common impetus for Anaxagoras' and Empedocles' purported diachronic solution. In light of the second difficulty, it is worth considering whether Anaxagoras and Empedocles view the project of explaining how the cosmos develops from the "One," not as a response to a conundrum generated by Parmenides' philosophy, but as the continuation of a theme that is already encapsulated within Parmenides' poem. Parmenides says that a governing divinity is responsible for all change in the natural world (B12) and Anaxagoras and Empedocles could easily understand this divinity to be a force that instigates motion within the "One." On this view, Parmenides' poem provides the impetus for Anaxagoras' and Empedocles' diachronic account. (Also, if Parmenides himself were to believe that the governing divinity instigates motion within the "One," then, barring other difficulties, his overall theory would no longer be discordant with his interest in natural science.) Thus, it is possible that Anaxagoras and Empedocles consider Parmenides to be a numerical monist, concerning the initial state of the universe, and a numerical pluralist, concerning subsequent states. This interpretation constitutes a fourth alternative for assessing Parmenides' philosophy. Nevertheless, the interpretation does not appear to be consistent with specific claims offered in the *Way of Truth* (as those claims are commonly understood). So, it remains credible to affirm that Parmenides is a numerical monist and both Anaxagoras and Empedocles understand him to be a numerical monist.

References and further reading

Barnes, J. (1982), *The Presocratic Philosophers*, second edition, London: Routledge and Kegan Paul.

Cornford, F. (1930), "Anaxagoras' Theory of Matter," *Classical Quarterly* 24: 14–30, 83–95.

Cornford, F. (1934), "Innumerable Worlds in Presocratic Philosophy," *Classical Quarterly* 28: 1–16.

Coxon, A. (2009), *The Fragments of Parmenides*, revised and expanded edition, Las Vegas: Parmenides Publishing. (All translations of Parmenides in this essay are based on those in Coxon.)

Curd, P. (1991), "Parmenidean Monism," *Phronesis* 36: 241–264.

Curd, P. (2004), *The Legacy of Parmenides: Eleatic Monism and Later Presocratic Thought*, revised paperback edition, Las Vegas: Parmenides Publishing.

Curd, P. (2007), *Anaxagoras of Clazomenea: Fragments and Testimonia*, Toronto: University of Toronto Press. (All translations of Anaxagoras in this essay are based on those in Curd.)

Furley, D. (2002), "Anaxagoras, Plato and the Naming of Parts" in V. Caston and D. Graham (eds.) *Presocratic Philosophy: Essays in Honour of Alexander Mourelatos*, Aldershot: Ashgate Publishing: 119–26.

Furth, M. (1974), "Elements of Eleatic Ontology" in A. Mourelatos (ed.) *The Presocratics: A Collection of Critical Essays*, Princeton: Princeton University Press: 241–270.

Gallop, D. (1984), *Parmenides of Elea: A Text and Translation with an Introduction*, Toronto: University of Toronto Press.

Graham, D. (1988), "Symmetry in the Empedoclean Cycle," *Classical Quarterly* 38: 297–312.

Graham, D. (2006), *Explaining the Cosmos: The Ionian Tradition of Scientific Philosophy*, Princeton, NJ: Princeton University Press.
Guthrie, W. (1965), *The Presocratic Tradition from Parmenides to Democritus: A History of Greek Philosophy*, Vol. 2, Cambridge: Cambridge University Press.
Inwood, B. (2001), *The Poem of Empedocles*, revised edition, Toronto: University of Toronto Press. (All translations of Empedocles in this essay are based on those in Inwood.)
Kerferd, G. (1974), "Anaxagoras and the Concept of Matter before Aristotle," in A. Mourelatos (ed.) *The Presocratics: A Collection of Critical Essays*, Princeton, NJ: Princeton University Press: 489–503.
Le Croce, E. (1980/81), "Empedocles' Sphairos and Parmenidean Legacy," *Platon* 32/33: 114–122.
Lewis, E. (2000), "Anaxagoras and the Seeds of a Physical Theory," *Apeiron* 33: 1–23.
Long, A. A. (1963), "The Principles of Parmenides' Cosmology," *Phronesis* 8: 90–107.
Long, A. A. (1974), "Empedocles' Cosmis Cycle in the 'Sixties'," in A. Mourelatos (ed.) *The Presocratics: A Collection of Critical Essays*, Princeton: Princeton University Press: 397–425.
Mansfeld, J. (1980), "Anaxagoras' Other World," *Phronesis* 25: 1–4.
Martin, A. and Primavesi, O. (1999), *L'Empedocle de Strasburg (P.Strasb. gr. Inv. 1665–1666), Introduction, edition et commentaire*. Berlin: de Gruyter.
McKirahan, R. (1994), *Philosophy before Socrates*, Indianapolis: Hackett.
O'Brien, D. (1969), *Empedocles' Cosmic Cycle: A Reconstruction from the Fragments and Secondary Sources*, Cambridge: Cambridge University Press.
Osborne, C. (1987), "Empedocles Recycled," *Classical Quarterly* 37: 24–50.
Palmer, J. (2009), *Parmenides and Presocratic Philosophy*, Oxford: Oxford University Press.
Schofield, M. (1980), *An Essay on Anaxagoras*, Cambridge: Cambridge University Press.
Sedley, D. (1999), "Parmenides and Melissus," in A. A. Long (ed.) *The Cambridge Companion to Early Greek Philosophy*, Cambridge: Cambridge University Press: 113–133.
Sedley, D. (2007), *Creationism and Its Critics in Antiquity*, Berkeley, CA: University of California Press.
Sider, D. (2005), *The Fragments of Anaxagoras*, second edition, Sankt Augustin: Academia Verlag.
Sisko, J. (2003), "Anaxagoras' Parmenidean Cosmology: Worlds within Worlds within the One," *Apeiron* 36: 87–114.
Sisko, J. (2005), "Anaxagoras and Recursive Refinement," *Ancient Philosophy* 25: 239–245.
Sisko, J. (2009), "On the Question of Homoeomereity in Anaxagorean Physics," *Apeiron* 42: 89–103.
Sisko, J. (2010a), "Anaxagoras Betwixt Parmenides and Plato," *Philosophy Compass* 5/6: 432–442.
Sisko, J. (2010b), "Anaxagoras on Matter, Motion, and Multiple Worlds," *Philosophy Compass* 5/6: 443–454.
Strang, C. (1963), "The Physical Theory of Anaxagoras" *Archiv für Gescichte der Philosophie* 45: 101–118.
Trépanier, S. (2004), *Empedocles: An Interpretation*, New York and London: Routledge.
Warren, J. (2007), *Presocratics: Natural Philosophers before Socrates*, Los Angeles, CA: University of California Press.
Wedin, M. (2011), "Parmenides' Three Ways and the Failure of the Ionian Interpretation," *Oxford Studies in Ancient Philosophy* 41: 1–65.
Zeller, E. (1889), *Outlines of the History of Greek Philosophy*, New York: Henry Holt.

Related chapters

1. The world of early Greek philosophy
3. Parmenides, Zeno, and Melissus

5
LEUCIPPUS AND DEMOCRITUS

Pieter Sjoerd Hasper

In the history of ancient philosophy, Leucippus and Democritus seem hardly separable from each other. Not even their works are always kept apart, and certainly Aristotle, our oldest source for their ideas and arguments, does not really try to distinguish between them as far as their ideas go, attributing them sometimes to one of the pair and sometimes to both together. We know that Leucippus was the inventor of atomism, formulating the idea that the whole of reality consists of indivisible, changeless and eternal bits of matter moving around in the void, some time shortly after the middle of the fifth century BC, though we do not have any certainty as to his dates; and that Democritus, presumably born some time before the middle of that century, took over Leucippus' core ideas and worked them out in a rather prolific way. But we do not really know how much of the core atomistic theory can already be attributed to Leucippus, and how much of the core theory is Democritus' invention.

What we do know, however, is that Democritus was argumentatively and conceptually the more advanced philosopher. We also know that Democritus was the more productive writer and did not confine himself to the field of physics and cosmology, as Leucippus seems to have done, but also wrote on, among other things, biology, poetry, mathematics, psychology, epistemology, and ethics (DK 68 A33 has an overview of titles). Indeed, were it not for the paucity of our sources, Democritus would have been generally known to be the greatest scientist-philosopher before Aristotle. Though clearly coming from a background of natural philosophy, he was also a part of the cultural movement in which also, among others, the sophists participated, with its interest in poetry, language, anthropology, and ethics. Also, in his study of mathematics he was one among several in the second half of the fifth century. More or less the only area for which we do not have evidence of his interest is that of the study of reasoning and persuasion. Thus Presocratic atomism almost coincides with Democritus' philosophy.

The foundations of atomism

In the abstract the usual story will have to be told about the origins of atomism: confronted with Parmenides' account of reality as without generation, corruption and change, many of those who, unlike Parmenides' successors Zeno and Melissus, did want to account for the phenomena of change and plurality, posited in one way or another elements which were eternal and free from change and which could be "deployed" in

various ways and by various means to explain both the stability of reality and its changeability. Democritus' changeless and eternal elements were the atoms, which moved each other by collision; their aggregation explains the apparent generation of new entities, whilst their (slight) rearrangement explains change, and their segregation the apparent destruction of things.

The details, however, of Democritus' account of the foundations of his atomistic theory are not so clear. Of course, we have Aristotle's account of Democritus' argument for the existence of atoms in *Gen. corr.* 1.2, 316a13–b34: we see that magnitudes are divisible, but it seems impossible that they are divisible everywhere; for if they were, it should be possible for there to be such a division everywhere, and thus that magnitudes would consist of nothing or of sizeless entities—which seems impossible; therefore these magnitudes, which are divisible at some places at least, are not divisible everywhere, and thus consist of atoms. There are, however, problems with this argument. First of all, it does not seem to be valid, trading on the ambiguity of "divisible everywhere": the impossibility of a division everywhere only establishes that the magnitude cannot be everywhere divided *at the same time*, not that there are places where it cannot be divided at all. Second, if valid, it would seem to establish atoms for every type of division, including mathematical division. But Democritus talks about atoms of different sizes, which seems inconsistent with mathematical atomism. Third, we know of an Eleatic argument (Simplicius, *in Phys.* 139.27–140.6; cf. *Gen. corr.* 1.8, 325a8–12) that tries to block the atomist's third way between divisibility everywhere and divisibility nowhere. Since a magnitude is everywhere alike or homogeneous, this argument points out, it cannot be divisible here and indivisible there; it must be either divisible everywhere or nowhere.

To add to these difficulties, it is not at all certain that this was Democritus' only argument for the existence of atoms. For if we compare this argument to the argument provided by Epicurus, who took over some of his core ideas from Democritus, we see that the latter is more intuitive and far more of a physical nature. Epicurus' argument (*Ep. Hdt.* 40–41) turns on the point that if a body is somewhere divisible, it is not hard, but weak: force applied to the body would cause the parts to come apart at that point and the body to give way. If a body were therefore to be divisible everywhere, it would be weak everywhere; in order to explain its ability to resist and thus its tangibility, we need to posit indivisible parts. It seems difficult to believe that this argument was not available to Democritus. Moreover, the basic point of this argument is attributed to him by Aristotle, in the guise of the idea that things can only undergo a change and thus may give way where they are not really continuous, but separated and thus divisible (for example, *Ph.* 8.4, 255a13–15). Aristotle even gives a version of the full argument, connecting it with Leucippus (*Gen. corr.* 1.8, 325b5–11; cf. [*MXG*] 6, 980a5–7).

Now the second argument for the existence of atoms lends itself to an interpretation according to which a divisible body is hard and indivisible where it is full and divisible where there is void. This fits also well with reports (DK 67 A14, DK 68 A47) that atoms are indivisible because of being full or solid, and not participating in the void—indeed, such explanations presuppose the framework of the second argument. Another advantage of this interpretation is that the three problems listed for the first argument would disappear as well: if atoms are divisible from each other because there is void between them, the argument would be valid because a body could only be divisible everywhere if there were already void everywhere; the argument would not lead to mathematical atomism, precisely because without void providing the ground for its divisibility—as it

cannot in the case of mathematical divisions—the argument would be invalid; and the Eleatic objection from homogeneity would also be irrelevant.

There is, however, one problem with this interpretation, and that is that we have sufficient evidence that Democritus thought atoms could touch, and that it was thus possible for two atoms to be divisible from each other without there being void between them (for example, *Gen. corr.* 1.8, 325a31–6, b29–32, Aristotle *De Democrito* = DK 68 A37, Simplicius *in Cael.* 609.19–24). What is more, he seems to have justified this possibility of touch by appealing to a principle: "From the really one a plurality cannot come to be, nor from the really many a unity—that is impossible" (*Gen. corr.* 1.8, 325a34–6). This also shows that Democritus was aware of the Eleatic objection, for it is only against the argument from homogeneity that it makes sense to insist that contact does not lead to unity.

Moreover, with this atomistic principle in place the two other problems with the first argument disappear: if added as a premise to that argument, it makes it valid since every possibility of division, that is, separation, is already grounded in there being "a real plurality," that is, division; and thus the argument without this principle—which need not pertain to mathematics—cannot establish mathematical atomism. That Democritus regarded his principle as a premise may be surmised from the fact that Aristotle does mention it in his summary of the first atomistic argument: "It is necessary, therefore, that there are invisible atomic magnitudes in it, especially if, that is, coming to be and passing away are to occur by segregation and aggregation" (*Gen. corr.* 1.2, 316b33–34). This identification of aggregation and segregation with coming to be and passing away respectively is in fact a reformulation of the atomist principle (Arist. *Cael.* 3.4, 303a5–8). Moreover, given the close similarity with an Eleatic argument that the whole of reality is indivisible because it cannot be divisible everywhere (for the same reason as in the atomistic argument) and it cannot be divisible at only some places (because of it being "everywhere alike"), it seems that Democritus consciously modeled his argument on that. But then he must have considered his atomistic principle as a premise of the atomistic argument, in order to reject that part of the Eleatic argument that he did not accept.

It may seem rather unsatisfactory that in the end this argument for the existence of atoms rests on a principle that is so close to atomism itself. For the principle posits, in effect, that all unities are absolute unities, and thus that all things that are not unities, are "mere" pluralities of these absolute unities. The argument only adds that a magnitude being composed of sizeless parts is impossible (a point taken for granted at that time) and that there are divisible things, as observation tells us. But this principle cannot have been completely obvious at the time, since Empedocles and Anaxagoras did not adhere to it, and it cannot be found in Parmenides either.

The most plausible explanation for Democritus formulating this principle is that he reflected on his arguments for the existence of atoms, notably the second one. For, as is clear from the basics of that argument, the atomistic principle is very intuitive once one starts thinking about physical division. If one wants to explain why some things are easier to divide than other things, the idea that this is because some things have more "weak spots" immediately suggests itself. Moreover, if one does not have any idea about matter having an internal structure whose parts require ever more energy to separate the smaller the scale gets (as on the modern conception), but thinks of it as homogeneous stuff, as everybody in Antiquity did, one must assume that at every place a body is either absolutely weak or absolutely hard, without degrees. This is the account Democritus adopts, and it implies his atomistic principle (cf. *Gen. corr.* 1.9, 327a11–13).

One consequence of this account of the existence of atoms is that the function of the void, that other ingredient of atomistic reality, is only to make motion (and thus the realization of alternative arrangements of atoms) possible. It is tempting to think of the void as empty space, but in fact it is more likely that Democritus treated it as another kind of stuff, a stuff that is absolutely malleable and thus does not come in determinate shapes, but is rather "without limit" (*De Democrito*). In reports "the full and the void," "the (t)hing (*to den*) and the nothing (*to ouden*)" and "what is and what is not" appear as the two principles of atomism, both equally real (DK 67 A6, DK 68 A38, DK 68 A45, *De Democrito*, Euseb. *Praep. evang.* 14.3.7), where especially the linguistic innovation *den* may be taken as indicative of the point that the "nothing" (*ouden*) is not absolutely nothing, but merely the negative counterpart of the full and what is, that is, or tangible, resisting, hard stuff. Democritus is, moreover, reported to have stated (for example, *De Democrito*, DK 68 B156, DK 67 A6, Euseb. *Praep. evang.* 14.3.7–9) that "(t)hing is no more than nothing," which seems a rather odd thing to say if "nothing" were just empty space, which could just as well be occupied by a "thing."

Many reports make it seem that with this claim that "(t)hing is no more than nothing" Democritus meant to provide an additional argument for the existence of void. However, as an independent argument this seems hardly successful, because of its paradoxical ring. Moreover, at *Metaphysics* A.4, 985b7–9, Aristotle rather suggests that this claim presupposes the existence of the void. More plausibly this claim is to be understood within the context of Democritus' appropriation of Eleatic concepts. Perhaps for Parmenides, and certainly for Melissus, "being" seems to refer to some kind of homogeneous tangible stuff; and Melissus argued that motion is impossible because it is only possible if there is some explanation for it to give way—and since what is, as such, is thought of as completely full, by itself never able to give way, one would need something else than what is to explain this: what is not, which, in his book, is not, in the sense of not existing. Democritus thus retains the Eleatic exclusive identification between tangibility and being, but maintains that there is no reason why there might not also be some non-tangible stuff.

In the reports about Democritus' principles there is a remarkable alternation between those that mention the atoms (units, of which there are infinitely many) and the void as principles, and those that mention two kinds of stuff, like the full and the void. Presumably this reflects different modes of presentation on Democritus' part. A similar alternation we find in reports featuring the modifications of being. On the one hand, Democritus says "that what is differs by contour, contact and turning," mentioning three modifications on an equal footing, which Aristotle elucidates as follows: "of these contour is shape, contact is order and turning orientation, as A differs from N by shape, AN from NA by order and I from H by orientation" (*Metaph.* A.4, 985b16–19, cf. DK 67 A14). It is, on the other hand, also clear that for Democritus there is a distinction between these three types of modification, in that the shape of an atom is ontologically more basic than the other two (for example, DK 68 A38)—it is not without reason that he called the atoms *ideai*, that is, "forms."

Atomistic explanations

Having established the existence of atoms, these unchangeable units of tangible stuff, and of the void, in order to explain the phenomena of motion, of material bulk and of hardness and divisibility, Democritus applied these principles in further explanations.

For these further explanations one needs more than bare units and void: atoms should have certain shapes and sizes and be organized in a certain way (the three modifications of the full mentioned above); moreover, it should be clear how atoms move and rest.

Democritus seems to have put forward two types of explanatory considerations. First, he formulated general constraints concerning the number and the shapes of atoms as well as their motions. Second, he gave explanations of specific phenomena, such as the generation of the cosmos and whatever is in there, the generation of animals, and all kinds of other natural phenomena, thus setting up relations between specific shapes and orderings of atoms and macroscopic, perceptible events.

As to the first type of explanatory considerations, Democritus held the universe to be infinite, but it is difficult to find an argument for this claim. The repeated reference to the void as 'the unlimited', however, suggests that he thought the void could not be limited by itself, so that it would go on and on (cf. DK 68 A56). In an infinite universe there is, of course, room for infinitely many atoms, and even a need for them, to account for the abundance of atoms at any one place, as the atoms would otherwise not have any reason to be here rather than there (Arist. *Ph.* 3.4, 203b24–7). There are even two arguments for the thesis that there are infinitely many shapes of atoms. One argument is again based on an indifference consideration, that there is no reason for there to be only these shapes, and not others as well. This argument seems to assume the infinity in number of the atoms. Aristotle (*Gen. corr.* 1.2, 315b9–15) also reports an argument based on explanatory considerations: there are infinitely many shapes of atoms, because there are infinitely many appearances (of the same thing), and "truth is in the appearances" (which presumably means that the appearances are to be accounted for by reference to the truth of atoms and the void—see below). One wonders, however, why it is not the case that infinitely many (small) differences in arrangement, rather than in the shapes of individual atoms, could account for this infinite variability. The possibility must not be overlooked that Democritus thought he had already established the infinite quantity of shapes and thus felt entitled to refer the infinite variety of appearances to these shapes.

As to the motion and rest of atoms, Democritus denied that atoms move by themselves. In this sense of not having a natural inclination to move downward, atoms do not have weight (DK 67 A6, DK 68 A47). He distinguished between three moments in motion: impact (*plêgê*), that is, the collision that brings the motion about (DK 68 A47); motion, which is something like impetus, maintaining the motion once brought about and not hindered; and counter-blow (*antitupia*), presumably to slow it down or to bring it to rest (DK 68 A66). Weight in the different sense of resistance to change in motion does play a role here: an atom is heavier proportional to its size (DK 68 A60), so that it is more difficult to give it speed or to take its speed away.

Ultimately everything happens for a reason in the sense that underlying any event there are the rests and motions of atoms, which are brought about by collisions between them, going back to infinity. Democritus called this "necessity" (for example, DK 67 B2 and DK 68 A39), and even seems prepared to talk about degrees of strength of necessity: atoms locked together only yield to a stronger necessity (*De Democrito*). Though there is not much general evidence on this score (only DK 68 A39), Democritus clearly presupposes that the shapes and sizes of the atoms involved in a collision determine its outcome. Thus Democritus adheres to determinism at the level of atoms.

These considerations provide the framework in which Democritus provided explanations for events at the macroscopic, perceptible level. In giving them he distinguished

between two types of events: those that occur "by chance" or "from itself" and those that occur naturally (DK 68 A69 and DK 67 A11). The examples of natural events provided concern the generation of animals and plants. The example mentioned of a chance event is the generation of a single world (cosmos). According to Democritus the universe did not constitute a single infinite world, but rather of infinitely many worlds, which are all generated from unordered swarms of atoms and eventually perish into them (for example, DK 67 A1, at 30–2, DK 68 B1, DK 68 A40).

The distinction most likely is between things generated on the basis of pre-existing similar structures, and things generated without such a basis. The generation of a world starts with the separation of the heavier from the lighter atoms, that is, by the introduction of some order where there was not any before. Crucial for the subsequent generation of a world is that a membrane of interlocking atoms comes into being in order to hold the whole world together (DK 67 A1, at 32). Within that stable structure, rotating motions produce several further permanent structures, in the case of our world the earth and then the other heavenly bodies, as well as the further furniture of the world, including living beings (DK 68 A40, at 13). A world is thus an equilibrium between stability and motion, and perishes with the disturbance of that equilibrium, or at least that of the stable structures (mentioned sources for such disturbances include collision with another world and the inability to take up further material from outside).

Thus, one may conclude that what kinds of living beings there are (or even that there are living beings) is a matter of chance (DK 68 A139). Once these kinds are there, however, the individual living beings are generated by nature, because the structures existing in the parents are reproduced in the offspring. That is presumably why Democritus stresses that semen comes from the whole body, that is, from all the important parts (DK 68 A140 and 141). As for the sex of the offspring, it depends on which semen dominates: that from the father or that from the mother (DK 68 A143). It is not only structures transmitted through semen that are rebuilt in the offspring, however: in the uterus structures existing in the mother are also reproduced (DK 68 A144). Just as in the case of the generation of a world, in this process first the outside of the living being is formed and then the internal structures (DK 68 A145). Despite this similarity, however, it is clear that as far as the generation of living beings is concerned, Democritus stresses more the stable factors and less the processes of motion which keep generation going, since these stable structures are built after external models. It seems that only in this way was Democritus able to imagine that the regularities in the generation of living beings can be explained, and that he thought that without such stable structures there would be infinite variety and thus chance.

Democritus seems to have limited natural events to the generations of living beings, for in his description of other phenomena, like meteorological and geological events, he does not refer to nature. Does that mean that he thought such phenomena are like the generation worlds and thus occur "by chance"? What about the regularities involved in such phenomena, in that they involve one (with thunder: DK 68 A93) or several (with earthquakes: DK 68 A98) fixed scenarios? We will not be able to answer these questions on the basis of any clear evidence, but perhaps we should also refuse to do so, since the pair "not based on any pre-existing stable structure"—"generated after some pre-existing stable structure" is not exhaustive: the generation of thunder, say, does not take place *on the model of* some stable structure, but still requires the presence of such structures.

What can at least be said, however, is that apart from the onset of the generation of a world, Democritus' explanations typically presuppose some background conditions in the form of stable (atomic) structures. Thunder, for example, does not take place without clouds, earthquakes not without caves in the earth. Only with these stable structures present can some type of atoms bring about the type of event to be explained. We shall see that Democritus basically adheres to this explanatory scheme in his explanations of perception.

Usually, then, Democritus' explanations consist of correlating a perceptible phenomenon with a state or an interaction at the atomic level. As said, he assumed that ultimately the shapes and sizes of the atoms involved, their interrelations (whether interlocking or not) as well as their motions, explain the outcome of these interactions. Sometimes, however, he seems to invoke other kinds of explanatory principles, notably the principle that like travels to like (for example, DK 68 A38). It may seem that this principle can be explained by reference to the interaction between atoms, as, for example, in Democritus' explanation of the generation of a world, or his account of why fire travels upwards. He appeals in both these cases to a sorting-out effect: in the rotating swirl the lighter atoms are separated from the heavier ones, and the finer atoms of fire are driven out of something burning upwards, in both cases presumably because the smaller atoms will move faster (for the explanation of fire going up, see DK 68 A61). In those cases, however, it is not similarity in shape, but primarily size that does the explanatory work. It is far more difficult to imagine a process in which mere shape explains the like-by-like result. This difficulty already surfaces in the report introducing the principle (DK 68 B164), but becomes obvious in Democritus' explanation of magnetism (DK 68 A165). Iron moves towards a magnet, according to Democritus, because they are made of similarly shaped atoms, though those of the magnet are finer than those of iron: first the finer atoms of the magnet move to the iron bar, because the atoms are alike; there they unfasten atoms in the iron bar, which then move to the magnet, because its atoms are alike (the resulting flow is to the magnet, because it contains more void). Thus we must conclude that Democritus did not stick rigorously to his clearly intended program of explaining, by reference to atoms, their interrelations and their motions alone.

Mathematics

We know that Democritus wrote several mathematical works, with titles like *On Geometry*, *Geometrical Studies*, *Numbers* and *On Irrational Lines and Solids* in two books. He was known as an "expert in geometry" (DK 68 A87); and Archimedes unambiguously reports that Democritus was the first to state that a cone is one-third of a cylinder with equal base and equal height, though without proof; and presumably also that a pyramid is one-third of a prism with equal base and height (*Methodus* 428.29–430.9). Were any arguments concerning these theorems, though falling short of real proofs, discussed in, say, *Geometrical Studies*? This would open up tantalizing possibilities of connecting them with Democritus' cone-paradox, which we find in Plutarch's report of Chrysippus' response to it (*De Comm. not.* 1079E–F = DK 68 B155), and which clearly involves issues of continuity and the status of indivisibles.

In terms of arguments the only solid ground we have is constituted by this cone-paradox, as follows: suppose we have a cone, cut it at a plane parallel to the base, and compare the inner surfaces of the two halves: are they equal or not? If not, the cone is not smooth but stepped, and thus not a cone. On the other hand, if the surfaces are

equal, so the paradox goes, the cone is not a cone either, but a cylinder, for the cone will be 'composed of equal and not unequal circles' or segments. The first horn is clear, the second not; it may be interpreted in two ways: either the segments or circles are indivisibles with thickness, without tapering off at all, or the circles are indivisibles without thickness (real planes). Either way every segment of the cone will be equal, on the first possibility because the upper and lower two surfaces of each segment are equal, so that, the surfaces of consecutive segments being equal, all surfaces are equal; and on the second possibility because the real plane-figures are ordered consecutively. The first possibility thus requires mathematical atomism to guarantee the segments not tapering off, the second composition from consecutively ordered infinitely thin indivisibles.

It seems that the language of the cone being composed of "circles" favors the second interpretation. Moreover, if a presupposition of mathematical atomism were at work, the paradox would not be by far as effective as it could be, since if one accepts mathematical atomism, there is no other option but to accept the first horn, that the cone is stepped. Furthermore, as we have seen, it is unlikely that Democritus was a mathematical atomist.

What could be the point of the cone-paradox? We do not have any indication in Plutarch's report, but there are basically three possibilities: (i) Democritus did not know himself and considered it a real problem; (ii) Democritus opted for one of the two horns; (iii) Democritus wanted to call attention to an underlying presupposition. Option (ii) seems impossible, for Democritus neither endorsed mathematical atomism nor composition from points, while option (i) seems preferable only if there is no plausible answer to the question which presupposition Democritus may have had in mind for option (iii), since one may assume that Democritus was aware of dilemmas being only solvable by pinpointing such a presupposition. Now one might think that the presupposition to be discarded can only be that a cone is composed of consecutively ordered circles. It need not be in these terms that it is to be discarded: this presupposition can also be described as the point that when the cone is put together again the two opposing surfaces are not coinciding, but merely touching. Is there any plausibility to the idea that Democritus wanted to discard the presupposition thus conceived?

Though it is easy and perhaps even necessary to be skeptical on these matters, I want to mention a possibility that has not been explored. Democritus could have been interested in the relation between surfaces, given that he held that atoms can touch and can only be acted upon at their surfaces (for example, *Ph.* 8.4, 255a14–15). Do they coincide or not? If so, then the boundaries of atoms are categorically different from parts of atoms and cannot, for example, by themselves be responsible for the impenetrability of atoms. Moreover, Democritus would then be committed to a distinction between the mathematical plane at which the boundaries coincide and the two physical boundaries themselves (cf. also *Gen. corr.* 1.8, 325a32–34). He would also thus be committed to a distinction between mathematical division, which does not involve two surfaces, but merely a plane drawn, and physical division, which does, because of there being two independent units.

The issue of the ordering of the surfaces can, moreover, be understood as deriving from arguments Democritus may have had for the two theorems about the cone and the pyramid. For if we take the theorem that a cone is a third of a cylinder of equal height and equal base-circle, it is quite possible that Democritus offered an argument which falls short of a full proof, but which can be connected with the cone-paradox, namely an

argument based on approximation: if, for every approximation of a cone and a pyramid by way of stacked cylinders and prisms, it can be shown that all the cylinders and the prisms are equal (which presumably at that time was possible), then one may assume that the cone and the pyramid are also equal. Each step in the approximation instantiates the first horn of the cone, while the second horn corresponds to the limit of such an approximation: then the upper surface of the one cylinder or prism is equal to the lower surface of the one on top of it, and if one maintains at the same time that the resulting infinitely thin cylinders or prisms are ordered in the same way as the approximating cylinders or prisms, the cone paradoxically turns out to be a cylinder.

I offer this train of thought only as an interpretative possibility, for it will be impossible to give any stronger arguments for it. But it would nicely connect up with several of Democritus' concerns, in his atomistic theory, in his mathematics, and about the relation between physics and mathematics.

Knowledge and reality

In principle Democritus must have been an empiricist, assuming that the source of our information about reality is perception. He is quoted as having the senses insisting to mind that it takes its evidence from them (DK 68 B125) and is also reported to have argued that the senses are in control over belief (DK 68 B9). In his scientific enterprise he aims to explain the perceptible phenomena, using analogies from sensible reality to elucidate or even frame these explanations (for example, DK 68 A93a, DK 68 A99a).

At the same time Democritus has ideas and arguments that are in tension with an empiricist epistemology. First, he argues that different animals have different perceptions and that the same animals have varying perceptions, so that the one perception does not have more claim to truth than another, it thus being unclear which appearances are true and which false, and even possible that there is no truth of the matter (DK 68 A112). Perception thus does not seem to be able to bring us very much. More importantly, Democritus' ontology undermines any claim to truth for perception. Only atoms (or the full) and the void are in reality, as he is many times reported to have claimed, while the perceptible properties are merely "by convention," and to judge from the examples commonly provided (warm and cold, colors and flavors), "by convention" means at least that they do not really exist, but are only considered to exist by us (DK 68 B9, DK 68 B117, DK 68 B125, DK 68 A49). Evidence suggests that Democritus extended this category to all features (see below), thus cutting perception off from everything real: "We know nothing in reality, for truth is in a pit" (DK 68 B117). Moreover, we ourselves, and our sense-organs, and even our mind, are constituted by aggregates of many atoms, just as the events which are our perceptions and thoughts consist in changes in or states of these aggregates. These changes or states may be caused by the kind of external influences giving rise to perception, but they are equally the product of internal states and changes beforehand, or of other external influences (DK 68 B7, Theoph. *Sens.* 64 and 67). Thus it seems difficult to think of the resulting state as a perceptual state, whose character is merely due to the perceived object. Even if they were, then there are still many possibilities for the flows of atoms coming from the objects we "perceive" to be disturbed along the way (cf. DK 68 A122), or even to come to be without any object, so that there may be an appearance without there being any truth whatsoever.

If the senses are to provide all information about reality, but they cannot really fulfill this function, the logical conclusion would be to deny that we have knowledge. Democritus may seem to have thought so as well, judging from his statement that "it will be clear that there is no way to knowing how each thing in reality is" (DK 68 B8).

There is also evidence, however, which points to the contrary. Most telling is the distinction Democritus draws between an illegitimate and a legitimate kind of cognition. The five senses are of the illegitimate kind, apparently because they are not able to function below a certain threshold and thus to reach the level of atoms and the void, while the legitimate kind does not have such limitations (DK 68 B11). Apparently Democritus thinks it is quite possible to grasp the reality of atoms and void, and thus to have knowledge.

As to how we are to acquire this knowledge, unfortunately, the sources are silent. One might even want to doubt whether Democritus did have an answer to this question, finding support in the response Democritus imagines for the senses: "Wretched mind, after taking from us your evidence, do you overthrow us? Our fall will be your defeat" (DK 68 A38). It is not clear, however, that this is Democritus' final word on the matter. In fact, this response targets a certain position held by mind, and thus it could just as well be the opening line of a substantive reply, correcting a certain view of the relation between illegitimate and legitimate kinds of knowledge.

Democritus is reported by Aristotle to have said that truth is in appearance (*Gen. corr.* 1.2, 315b9–10) or even that "what appears in perception must be true" (*Metaph.* Γ.5, 1009b13–15). This claim cannot be interpreted in the relativistic way in which Protagoras formulated the same claim, since we know that Democritus argued against Protagoras' position (DK 68 A114, cf. B156); it must thus have had a more objectivist import. As Aristotle reports, it was based on the ideas that perception is understanding, and that perception consists in a physical alteration of the perceiver (*Metaph* Γ.5, 1009b12–15). At the same time, as we saw above, the second idea also plays a role in the Democritean argument undermining the very status of such an event as a (reliable) perception. So it seems likely that for Democritus this idea on the one hand undermined the claim to knowledge of the senses, and, on the other, established their status as truthful for every appearance. The latter point is confirmed by the function of the claim that "truth is in the appearance" has in the argument for the infinite variety of the atomic forms: in order to explain appearances, including contrary ones, we must posit facts at the atomic level (*Gen. corr.* 1.2, 315b9–15). The truth of every appearance is thus not a matter of correspondence to the true reality of atoms and void, but rather of every appearance being, as it is, caused by some interaction at the level of atoms and void—a truth we have access to by having appearances. Thus though there may be an ontological gap between the conventional world of the senses and the real world of atoms and void, in epistemological terms Democritus seems to favor a transitional account (cf. DK 68 A111).

Of course it is not any causal interaction at the level of atoms and void that counts as a perception. Though we do not have an overview for all the senses, Democritus gave accounts as to why some sense-organs are suited for perception: sight resides in the pupil, being moist and thus transparent and being able to retain images (the effluences coming from the perceived object), with things being present in the eye which have the same shape as the images, so as to make perception easier; hearing is a kind of vessel, thus being a receptacle ready to take up penetrating and inflowing atoms. Similarly the soul can think, if it is in a balanced state of mixture, presumably because it is then

not disturbed by influences from outside (except, one supposes, appearances). Only the perception of hot and cold does not seem to involve a specifically prepared organ, as something appears hot if it causes there to become more void in the body, and cold if less void.

These accounts follow a certain scheme, namely that there is a normal or neutral state for the organs to be in, so that any alteration caused by incoming atoms is "noticed," thus constituting an appearance (this even holds for hot and cold) (cf. *Sens*. 63). Something similar seems to apply to mind and thinking. Thus, just as in his scientific explanations of phenomena at the level of aggregates of atoms, Democritus presupposes some fixed structures within which there is room for regular causal patterns. The variations between animals, whether species or individuals, and over time within an individual, may make the picture more complicated, but the scheme need not be radically different. This means that it is possible to set up explanatory relations between appearances and the underlying reality of atoms and void, of the kind Democritus is reported to have provided in abundance, notably for flavors and colors.

In light of the above, we may also come to understand the claim attributed to Democritus that it is either unclear which of opposite appearances is true, or there is not a truth of the matter (DK 68 A112). As to the first half of this statement, it suggests that there is a truth of the matter, which is merely unclear to us. There is also further evidence that this was indeed Democritus' view, for Theophrastus, *De Sensibus* 67, tells us that at least as far as flavors are concerned the predominant shape or ordering of the atoms involved determines the resulting appearance, "further depending on the state [of the subject] it comes to; for this as well differentiates the opposites due to the same thing to not a small degree." Theophrastus goes on to hammer Democritus on precisely this point, for how can one say at the same time that opposite appearances are equally true, even though they are explained by differences in the perceiver, and that the predominance of certain atoms determines the appearance, as if only one of the appearances is correct? As to the second half of the claim, further, one may similarly wonder how one is to explain there not being a truth of the matter is a distinct possibility for Democritus, if all appearances are true. Both questions can be answered if one assumes that Democritus argued that as far as appearances go, there is no way of finding out which is true, and that there is thus in a certain respect no truth of the matter, though at the same time there is a truth at the level of atoms and void which is unclear to us, but which does, *standardly*, correspond causally to one of the opposite appearances. Of course there is something arbitrary to this standard (presumably the average human case), but it is certainly the most interesting case.

Finally, there is some issue as to how comprehensively Democritus' claim that there is no truth of the matter for appearances ought to be taken. In fact this claim is identical to the already-quoted thesis that perceptible features exist "by convention" and not in truth. Now when this thesis is referred to in the sources, the perceptible features mentioned are merely flavors, colors, and hot and cold (Plutarch, *Adversus Colotem* 1110E–F, adds "aggregation," but this does merely refer to an aggregate thought of as unity persisting through alterations, not to the aggregate itself). There are, however, many reports in which these features are extended to all perceptible features and thus to all appearances (DK 68 A49, DK 68 A59, DK 68 B9, DK 68 B117 and Sext. Emp., *Math*.8.18). Thus all features as they appear in perception would not be real.

A further complication here is that Theophrastus, *De Sensibus* 60–3, makes much of Democritus' "definition" of hard and soft as well as heavy and light in terms of the

atomic structure of things, other features not having such a nature. Is there then a truth of the matter for these features, as opposed to other perceptible features? The tension can be resolved if one takes into account the way in which Theophrastus describes the contrast: features having a nature do not involve a change, such as giving off effluences, in the object perceived when bringing about an alteration in us. Thus only fully "passive" features have a nature, but this does not mean that such passive features cannot bring about a change in us constituting a perception; it only means that the change necessary for such a perception must come from us, for example by pushing against the object. We may therefore safely conclude that Democritus really thought that all features as they appear in perception are "by convention" and not real.

Ethics

Most of the fragments we have from Democritus are about ethics, even if we were to refuse to include those that are presumably incorrectly ascribed to some "Democrates." Typically, they are short, and the reports concerning arguments or interconnections between ideas and concepts are very scarce indeed. It is nevertheless clear that Democritus' thoughts on ethics were interesting and pioneering.

The most striking thing about Democritus' ethics is that he posited some kind of goal in life consisting in a good condition of the soul. Democritus had several names for this good condition of the soul, ranging from *euthymia* ("well-spiritedness" or "contentment"), *euestô* ("well-being") and *eudaimonia* (traditionally translated as "happiness") to *athambia* ("undisturbedness," particularly from fears) (for example, DK 68 A1 = Diog. Laert. 9.45, A169, B40, and B170 and 171). He characterized this condition of *euthymia* as the state in accordance with which the soul "proceeds peacefully and in a well-settled way," negatively as the state in which it is not disturbed by fear and passion (Diog. Laert. 9.45).

Democritus' basic idea seems to be that though there is enough for everybody to fulfill his basic needs (DK 68 B175–176, 223), it is easy to want more than nature can reliably provide, so that the desires one has will often be frustrated, which will lead to pain and unrest (B235), and thus to unhappiness. An exacerbating factor is that the soul is such that if it has desires that are frustrated, these desires tend to "blind the soul" (B72). People with such a life do not lead a natural and free life (A166) or even live in the proper sense at all (B160). They cannot accept that life is finite, because they are never satisfied and are afraid of what is to come afterwards; Democritus calls them fools (B199–206). In order to restore balance and harmony, and thus *euthymia*, in the soul again, Democritus recommends to scale down one's desires (B31, 284, cf. B62 and 146) and to practice moderation (B211, 236), giving up on what he calls the desires of the body (cf. B189). Possible strategies are to compare one's life with those who have even less than oneself (B191) and to travel, in order to learn to be satisfied with little (B246). One should be satisfied with what is achievable (B191) and not strive for anything more, as one becomes then dependent on luck (B3, cf. 176 and 210).

For Democritus some notion of pleasure or joy is closely associated with this good state of the soul, as he held it to arise from "moderation of joy and harmony of life"; the opposite of *euthymia*, consisting in great disturbances in the soul, comes about from "shortages and excesses" as they involve the soul "moving over great distances" (B191), and thus involves pains. Even more explicit is Democritus' statement that "joy and

sorrow are the measures of what is beneficial and harmful", that is, presumably, for the soul (B4 with 188). By that he does not mean that every state of pleasure or joy leads to *euthymia*, for "one must not choose every pleasure, but that in the case of what is fine" (B207). The kind of pleasure to be avoided consists in those "based on mortal things" (B189) and comprises those that "exceed what is appropriate in food, drink, or sex" (B235), whereas pleasures in the case of what is fine comprise those coming "from contemplating fair deeds" (B194), the ones "reason takes from itself" (B146). Most likely the distinction between good and bad pleasure is paralleled by the distinction between desires for the more divine goods of the soul, and the ones for human goods of the housing, that is, of the body (B36=187, 37; cf. B40, 170–171). This distinction can also be drawn between pleasures which are short-lived and make one crave for ever more and thus fulfill desires which are too great and too strong, and pleasures which result from measured desires (B211, 219, 224, 233, 235, cf. B214).

Once one grasps and is able to apply this distinction, one will only desire what is beneficial and good (cf. B79). Democritus may appear to have thought about this grasp in rather intellectualist terms, it being a matter of intelligence, thinking, wisdom, understanding, learning and reason (for example, B42, 77, 105, 119, 175, 197, 290). Thus he claimed that the "cause of wrongdoing is ignorance of what is better" (B83). By way of the epithet "steadfast" (*athambos*) wisdom is perhaps even implicitly identified with undisturbedness (*athambia*) and thus with *euthymia* (B216, cf. 31). One should not overdo Democritus' intellectualism, however, since his conception of reason is rather inclusive, also involving having the right desires as well as a sense of shame for oneself if one fails to do what is good (B84, 244, 264; cf. 43).

Democritus liked to talk about the soul in terms of health and illness (B31, 149, 191, 288) and this fits his conception of *euthymia* very well. It seems that he just assumed that this health of the soul leads to actions and attitudes that are good for others as well (for example, B181, 215). Accordingly he thought of the common good and justice too, primarily in terms of a state in which nobody would take more than an equitable share, not desiring more, and thus not harming others (B102, 252, 255).

References and further reading

The numbered references (DK) in this chapter are to:

H. Diels and W. Kranz (1964), *Die Fragmente der Vorsokratiker. Griechisch und Deutsch* II, 11th edn., Zürich and Berlin: De Gruyter

The most complete collection of fragments and testimonia, however, is:

S. Luria (1970), *Democritea*, Leningrad
and with Italian translation:
S. Luria (2007), *Democrito. Testimonianze e frammenti*, Milan: Bompiani

The most complete collection of translated fragments and testimonia, together with mostly very helpful comments is:

C. C. W. Taylor (1999), *The Atomists: Leucippus and Democritus*, Toronto: University of Toronto Press.

Of the selective collections in translation, probably the best (being the source of some of my translations) is in:

D. W. Graham (2010), *The Texts of Early Greek Philosophy. The Complete Fragments and Selected Testimonies of the Major Presocratics* I, Cambridge: Cambridge University Press.

The only two recent monographs on Democritus are written in French:

P.-M. Morel (1996), *Démocrite et la recherche des causes*, Paris: Klincksieck.
J. Salem (1996), *Démocrite: Grains de poussière dans un rayon de soleil*, Paris: Vrin.

Further there are two collections of articles about Democritus:

L. Benakis (ed.) (1984), *Proceedings of the First International Conference on Democritus*, Xanthi.
A. Brancacci and P.-M. Morel (eds.) (2007), *Democritus: Science, the Arts, and the Care of the Soul*, Leiden: Brill.

Finally, helpful articles or chapters on aspects of Democritus' philosophy, including those not dealt with in this chapter, can be found in:

Annas, J. (2002), "Democritus and Eudaimonism", in: V. Caston and D. W. Graham (eds.), *Presocratic Philosophy: Essays in Honour of Alexander Mourelatos*, Aldershot: Ashgate, 169–181.
Barnes, J. (1979), *The Presocratic Philosophers*, London: Routledge.
Hasper, P. S. (1998), "The Foundations of Presocratic Atomism", *Oxford Studies in Ancient Philosophy* 19: 1–14.
Kahn, C. G. (1985), "Democritus and the Origins of Moral Psychology", *American Journal of Philology* 106: 1–31.
Lee, M.-K. (2005), *Epistemology after Protagoras: Responses to Relativism in Plato, Aristotle, and Democritus*, Oxford: Oxford University Press.
Pasnau, R. (2007), "Democritus and Secondary Qualities", *Archiv für Geschichte der Philosophie* 89: 99–121.
Procopé, J. F. (1989), "Democritus on Politics and the Care of the Soul", *Classical Quarterly* 39: 307–331 [with appendix: *CQ* 40 (1990), 21–45].
Schofield, M. (2002), "Leucippus, Democritus and the οὐ μᾶλλον Principle: An Examination of Theophrastus *Phys.Op.* Fr. 8", *Phronesis* 47: 253–263.
Sedley, D. (1982), "Two Conceptions of Vacuum", *Phronesis* 27: 175–193.
Vitrac, B. (2001), "L'interprétation mathématique du dilemme du cone (68DK68 B 155). Démocrite était-il mathématicien?", in: P.-M. Morel and J.-F. Pradeau (eds.), *Les anciens savants. Études sur les philosophie préplatoniciennes*—special issue of *Les cahiers philosophiques de Strasbourg* 12: 89–129.
Warren, J. (2002), *Epicurus and Democritean Ethics. An Archaeology of* Ataraxia, Cambridge: Cambridge University Press.

Related chapters

1. The world of early Greek philosophy
3. Parmenides, Zeno, and Melissus
22. Aristotle's philosophy of nature
45. The ancient commentators on Aristotle

6
PYTHAGOREANS AND THE DERVENI PAPYRUS

Gábor Betegh

The "Pythagorean Question"

In this chapter we are concerned with the early phase of Pythagoreanism, starting at the turn of the sixth and fifth centuries BC with Pythagoras himself, and ending with the fourth century when the original Pythagorean communities ceased to exist. I shall not discuss in any detail the philosophical strand, sometimes referred to as New Pythagoreanism (Kahn 2001), which started among Plato's immediate disciples at the Academy, re-surfaced in a somewhat recast form around the first century BC, and then merged with mainstream Platonism around the third and fourth centuries AD, to remain an integral part of the most influential philosophical tradition of Late Antiquity (cf. Bonazzi, ch. 39, and Karamanolis, ch. 43, in this volume).

The principal methodological difficulty we face in trying to reconstruct and evaluate the pre-Platonic phase of Pythagoreanism, and in particular the contribution of Pythagoras himself, stems exactly from the enormous influence of New Pythagoreanism. Our Hellenistic and especially late antique sources abound in expositions of the teaching of Pythagoras and his early followers, yet the vast majority of this body of evidence is seriously suspect. For one operative assumption of New Pythagoreanism consisted in the claim that Pythagoras, this semi-divine sage, was the principle source of everything that was worthwhile in Greek philosophy and science. This assumption resulted not only in attributing to Pythagoras patently Platonizing views, but also in forging under the names of Pythagoras and his historical and fictional pre-Platonic followers treatises which were heavily influenced by the philosophy of Plato and Aristotle, or were in effect paraphrases of their most influential works (Thessleff 1965). Eventually, Pythagoras became not merely the ultimate originator of all the major intellectual achievements of the Greeks, but the one who had given a full exposition of everything that is valuable in philosophy, mathematics, and the sciences. Iamblichus' statement in his *Life of Pythagoras* (fourth century AD) is highly characteristic of this reverential stance:

> These [that is, the writings of Pythagoras and his disciples], then, transmit from high above the science of intelligible beings and of gods. After that, he gives a superior instruction about the whole of physics, completing ethics and logic,

> and transmits all sorts of studies and excellent sciences, so, that, on the whole, there is nothing pertaining to human knowledge about whatever subject that is not discussed minutely in these writings
>
> (Iambl. *VP* 29)

All modern commentators would of course agree that this is absurdly exaggerated. What remains nonetheless contentious, if we peel off the layers of New Pythagorean aggrandizement and the Platonizing reinterpretation, is how much we are left with as the early Pythagoreans' original contribution to the history of Greek philosophy and science. Indeed, on the basis of what criteria can we tell what is genuine and what is later addition and distortion? This is the daunting methodological problem that is sometimes labeled the "Pythagorean Question" (Kahn 2001: Ch. 1; Zhmud 2012: introduction; Huffman 2011: section 1). What makes this problem so formidable is an unhappy confluence of several factors. First, it is now generally accepted that Pythagoras was one of those sages who did not write a philosophical or scientific treatise—so Iamblichus' testimony is misleading even in this respect. Moreover, in the case of other Presocratics, we can, with due caution, rely on later summaries transmitted in the so-called doxographical literature (see Palmer, this volume). Now the main bulk of doxographical reports ultimately goes back to Theophrastus' *Physical Tenets*. The trouble is that there is clear evidence to the effect that Theophrastus' account of the Pythagoreans was already molded by New Pythagoreanism (cf. *Metaph.* 11a27–b17). Thus, the reports on Pythagoras and the early Pythagoreans will be slanted in this way even outside the Platonist tradition. Finally, apparently none of Pythagoras' immediate disciples wrote anything either, and did not record Pythagoras' teaching as, for instance, Plato and Xenophon did for Socrates, and Timon for Pyrrho; indeed, it was apparently prohibited for them to divulgate their master's tenets. So if the reconstruction of the philosophy of Socrates is sometimes considered to be "beyond the reach of historical scholarship" (Kahn 1992: 240; cf. Bryan in this volume), the prospects for a historical reconstruction of the philosophy of Pythagoras look even less promising.

We have some scraps of evidence apparently untainted by New Pythagorean distortion. The most important source of information is probably Aristoxenus, another first generation Peripatetic like Theophrastus. He came from the Southern Italian Tarentum, an important Pythagorean center, and was then taught by the Pythagorean Xenophilus in Athens before joining Aristotle's school. Aristoxenus wrote extensively on the Pythagoreans, and although none of these treatises survived, we have reason to believe that his works were used by our Neoplatonist sources, including Iamblichus. The difficulty, once again, is how to separate the information coming from Aristoxenus from the New Pythagorean reinterpretation.

Aristotle himself is an important source. He wrote treatises on individual Pythagoreans, and general works with the titles *On the Pythagoreans* and *Against the Pythagoreans*. Unfortunately only scarce fragments remain from these texts. Aristotle, however, also makes repeated references to the Pythagoreans—although never to Pythagoras himself—in his surveys of the views of earlier philosophers in his extant works. In these contexts he occasionally makes an explicit distinction between the teaching of the Pythagoreans on the one hand, and Plato's late metaphysics and the views of Plato's Pythagoreanizing disciples on the other. Indeed, Aristotle had good reasons to distinguish clearly between pre-Platonic Pythagoreanism and its Platonist reinterpretation, insofar as his principal philosophical opponents were exactly those philosophers in

Plato's Academy who claimed Pythagoras' authority for their own version of Platonic metaphysics. This very polemical context, however, could not leave his presentation and assessment of early Pythagoreanism completely untouched. All in all, even if Aristotle's testimonies are invaluable, we need to take them with some critical distance as well.

Early evidence about Pythagoras

The figure of Pythagoras became cloaked in many fanciful stories already by the time of Aristotle; it was claimed that, being more than a simple human, he was endowed with superhuman qualities, enabling him, among other marvelous deeds, to be present in two different places at the same time, to converse with beasts and rivers, and to sport a golden thigh as a sign of his divinity. His biographies present a further stratum that records historically possible, albeit unverifiable episodes. The most notable among these relate his early travels to the East—primarily to Egypt, but perhaps also to Babylonia and Phoenicia. This detail, whether historical or fictitious, became especially significant for those authors who wanted to claim that all wisdom, and especially mathematics, arrived from the East. Finally, the skeleton of his biography can nonetheless be established with a fair amount of certainty on the basis of the three most important extant accounts of his life, by Diogenes Laertius, Porphyry, and Iamblichus. According to these accounts, he grew up on the island of Samos during the second half of the sixth century BC. Then, around 530, he moved to the Southern Italian city of Croton, where he rapidly acquired an extraordinary reputation, gathering around himself men and women who decided to lead a special lifestyle according to the precepts and taboos he set down. Such closed societies were subsequently founded all around Magna Graecia, with their members also playing prominent roles in local politics. Their power, exclusivity, secretiveness, and the proverbially strong personal bonds among them created rancor and lead to hostilities against them; already Pythagoras was apparently forced to leave Croton, and we have reports about a large-scale massacre of Pythagoreans in Southern Italy, and the burning of their communal places, from around the middle of the fourth century (Polybius 2.39.1–2).

The precepts around which the life of Pythagoras' followers was organized focused primarily on ritual activities, such as the correct way of performing sacrifices, and burying the dead (Hdt 2.81). There are other rules the significance of which is far from transparent—for instance that fire is not to be poked with a sword, and whether the right or left sandal is to put on first; such rules naturally invite allegorical explanations. All our sources emphasize that dietary rules were central to the Pythagorean way of life. Some injunctions, such as the prohibition on eating beans, are customarily mentioned, while the sources are not unanimous over whether a Pythagorean was allowed to eat any kind of meat, or what species, or what parts of animals were taboo.

It is eminently likely, although never clearly stated in the early sources, that the restrictions on eating meat were connected to Pythagoras' eschatological doctrines—in fact, his primary claim to fame in the early period seems to be exactly his tenets about the fate of the soul. As Dicaearchus, yet another one of Aristotle's disciples, wrote:

> What [Pythagoras] told to his audience no one can tell with certainty; for they were required to keep it in silence. It nevertheless became known to everyone, first, that he taught that the soul is immortal, and, next, that it transmigrates

> into all kinds of animals, furthermore, that with certain periodicity the same things happen again, and nothing is new absolutely, and that we should consider all ensouled beings akin.
>
> (Porph. *VP* 19)

This report is also consistent with our earliest evidence, the anecdote recorded by Pythagoras' contemporary Xenophanes:

> Once he passed by as a puppy was being beaten,
> the story goes, and in pity he said these words:
> "Halt, don't beat him, for it is the soul of a man, a friend of mine,
> I recognized it when I heard it crying"
>
> (DK 21 B7)

As other sources intimate, Pythagoras taught that one's soul was supposed to receive a better or worse lot depending on the life one was leading (Ion of Chios DK 36 B4). If so, Xenophanes' gibe receives a strong critical edge: Pythagoras' friends can expect to be reincarnated in such unenviable life forms.

The spiteful denouncement by Heraclitus of Ephesus, however, shows that Pythagoras must have been known for a wider range of doctrines already in his lifetime:

> Pythagoras, son of Mnesarchus, practiced inquiry most of all men and by selecting these things which have been written up, made for himself a wisdom, a polymathy, an evil conspiracy"
>
> (DK 22 B129, trans. Huffman)

This fragment, and especially the reference to "inquiry," has been taken to imply that Pythagoras also expounded an Ionian type of cosmology (Kahn 2001: 16–7). Carl Huffman has persuasively argued, however, that we do not need to suppose that, and the set of pithy sayings attributed to Pythagoras, known as *akousmata* ("things heard"), could well fit the bill (Huffman 2008). Often formulated in a question-and-answer format, the *akousmata* indeed cover a wide range of subjects, declaring, for instance, that the Islands of the Blessed are the sun and the moon, or that the oracle at Delphi is the *tetractys*, that is, the sequence of numbers 1–2–3–4 to which the Pythagoreans attributed a special mathematical and religious significance (Iambl. *VP* 18).

It seems to me that the very existence of the *akousmata* makes it unlikely that Pythagoras offered a comprehensive theory parallel to them. The power of the *akousmata* resides precisely in their enigmatic nature—a power that they would lose had they been complemented by a detailed, explicit account. Moreover, Heraclitus' criticism might be understood as claiming precisely that Pythagoras hoarded these disconnected pieces of purported wisdom from different sources, without creating a coherent theory out of them. On the other hand, these puzzling sayings naturally invite interpretation. Thus, someone who accepted Pythagoras' authority and had a more inquisitive mind could mobilize also his or her acquaintance with Presocratic theories in trying to understand what the master could have meant when he proclaimed, say, that "harmony is the finest" and that "number is the wisest." The *akousmata* could accordingly serve as starting-points for theory building.

Early Pythagorean philosophers: who are they?

The first generations of Pythagoreans were characterized by three related features. First, a membership to Pythagorean associations; second, an adherence to a certain way of life involving ritual and dietary prescriptions; and, third, an acceptance of the doctrine of reincarnation and the truth of a set of enigmatic sayings attributed to Pythagoras. It is unclear whether the latter two were codified and uniform across all Pythagorean communities, or—as some evidence suggests—different groups could accept somewhat different rules and taboos, and could at least offer different interpretations to the *akousmata*.

It is important to recognize, however, that the terms "Pythagorean philosopher" or "Pythagorean mathematician" are ambiguous. For a philosopher or a mathematician can belong to a religious community, and lead his or her life according to that creed, without this fact defining or distinctively marking his or her intellectual achievements. The fact that someone was a Pythagorean might or might not have been essential or explanatory to his or her philosophical or mathematical interests and achievements.

At the end of Iamblichus' *Life of Pythagoras* we find a list of Pythagoreans, probably going back to Aristoxenus, including the names of 218 men and 17 women (Iambl., *VP* 36). In the vast majority of cases, the items are mere names to us, and there is thus no telling whether, say, Damotages of Metapontum ever engaged in any serious intellectual study. Second, to some people on the list important philosophical or mathematical achievements can be attributed on the basis of independent evidence, but who are not customarily treated as Pythagoreans in other sources. This is the case for the philosophers Alcmaeon, Parmenides, and Melissus, and the mathematician Theodorus of Cyrene. It is perfectly conceivable that Aristoxenus or some later author inserted their names with the aim of boosting the Pythagorean contribution to Greek intellectual life. Or perhaps some of them did observe some aspects of Pythagorean practice without this making any impact on their recorded intellectual output.

The most complex case is certainly that of Empedocles, who is often treated in the ancient tradition as a Pythagorean. Indeed, in Empedocles' poems we find an expression of all the eschatological tenets that Dicaearchus attributes to Pythagoras, together with comparable dietary taboos, and a cyclical cosmogony. Moreover, all these tenets form the backbone of a grand and detailed cosmological theory. So if by "Pythagorean philosopher" we mean someone who offers a philosophical exposition and elaboration of the principal doctrines that are safely attributable to Pythagoras, then Empedocles would seem to be the paragon. Yet, the majority of historians of philosophy resist this conclusion. It is not enough to point out that "whatever the initial Pythagorean influences, he developed a philosophical system that was his own original contribution" (Huffman 2010: 3.1), for this will be true also of at least some of those who *are* generally treated as Pythagorean philosophers and whom we shall consider in the next section. The difference, I suggest, is rather that instead of being a follower of Pythagoras, Empedocles presented himself as a second Pythagoras, claiming to himself comparable semi-divine status, charismatic powers, and prodigious deeds.

Finally, a handful of names scattered on Iamblichus' list are often—although by no means uniformly—identified as Pythagoreans in other sources as well. More importantly, there is a common thematic thread joining their work that, as we shall see, might also be traced back to the earliest stratum of Pythagoreanism. At the same time, it is noteworthy that the religious and eschatological aspects of Pythagoras' teaching left no discernible trace on their intellectual pursuits.

Hippasus, Philolaus, Eurytus, Archytas

Philolaus is the first philosopher who is customarily called a Pythagorean by our sources and who demonstrably wrote a philosophical treatise (see for example, Diog. Laert. 8.85; for counterarguments, see Zhmud 1998). Nonetheless, we have to face the problem of later forgeries and spurious attributions of doctrines in his case as well. Indeed, for a long time it was assumed that we have no reliable information about Philolaus at all. However, in his groundbreaking study of early Pythagoreanism Walter Burkert (Burkert 1972) has conclusively shown that about a dozen centrally important fragments are free from later distortions and probably come from Philolaus' book. Carl Huffman subsequently offered a meticulous re-examination of the relevant texts, and his results largely reinforce Burkert's conclusions (Huffman 1993). Just as importantly, Burkert has demonstrated that although Aristotle refers to Philolaus by name only once in his extant works (*Eth. Eud.* 2.8 1225a30 = F16), Philolaus' book was Aristotle's primary source for his reports on the views of the "so-called Pythagoreans" (for counter-arguments, once again, see Zhmud 1998). Thus, Aristotle's testimonies can supplement in crucially important ways the verbatim fragments. From this new appraisal, Philolaus has emerged as a thinker of considerable philosophical interest, who takes up the major themes of Presocratic natural philosophy but develops them in original ways by employing some fresh arguments and novel explanatory concepts.

There is, however, some evidence that Pythagoreans prior to Philolaus also advanced physical and cosmological theories. Most prominent among these is the fifth century Hippasus, who, according to some later testimonies, created a split among the Pythagoreans precisely by conducting and encouraging original scientific and mathematical research, instead of simply accepting the received wisdom of the *akousmata* (Iambl. *De Comm. Math. Sc.* 76.19 with Burkert 1972: 192–208). Given the extreme scarcity of the evidence, it is hard to evaluate exactly how far Philolaus could build on this scientifically oriented tradition within Pythagoreanism, and on Hippasus' research in particular.

As is evident from the fragments and testimonia, Philolaus' work covered the standard Presocratic topics starting from an account of the generation and structure of the cosmos, continuing with embryology, human physiology and pathology, and comprising also a fairly detailed philosophical psychology, distinguishing among the psychic faculties of different kinds of living beings.

In good Presocratic fashion, Philolaus built up his cosmology from a set of basic constituents. It will be worthwhile to quote in full the three principal fragments (translation based on Huffman 1993):

> (B1) Nature in the cosmos was fitted together both out of things-that-are-unlimited and out of things-that-are-limiting, both the cosmos and all the things in it.
>
> (B2) It is necessary that the things that are be all either limiting, or unlimited, or both limiting and unlimited, but they could not always be unlimited alone. Since, then, it is manifest that they are neither from things-that-are-limiting, nor from things-that-are-unlimited alone, it is clear then that the cosmos and the things in it were fitted together from both things-that-are-limiting and things-that-are-unlimited. And this is made clear also by the way

> things function. For some of them, from things-that-are-limiting, limit, others from the things-that-are-limiting and the things-that-are-unlimited, both limit and do not limit, and yet others, from things-that-are-unlimited, are evidently unlimited.
>
> (B6) Concerning nature and fitting-together (*harmonia*) the situation is this: the being of things, which is eternal, and the nature [of things] in itself admit of divine and not human knowledge, except that it was impossible for any of the things that are known by us to have come to be, if the being of the things from which the cosmos came together, both the things-that-are-limiting and the things-that-are-unlimited, did not pre-exist. But since these starting points (*archai*) pre-existed, and were neither alike nor of the same stock, it would have been impossible for them to be arranged in a cosmos, if fitting-together had not supervened, in whatever way it came to be. Like things and things of the same stock had no need of fitting-together in addition, but things that are unlike and not even of the same stock … [text uncertain] it is necessary that such things be bonded by fitting-together, if they are going to be held together in a cosmic order.

From these sentences we learn, first of all, that the cosmos had a temporal beginning. This was a contentious point in Presocratic philosophy, and Philolaus does not seem to offer any argument for his position. Second, that certain things must have existed before the birth of the cosmos; Philolaus calls these entities starting points or beginnings (*archai*). That there must have been some pre-existent things is unsurprising in so far as *creatio ex nihilo* had never been a live option in the Presocratic context. Yet, in contrast to the general practice of his predecessors, Philolaus does not say *what* these pre-existent things are; rather, he specifies the basic *functional* attributes that the starting points must possess so that the cosmos and the things it contains can acquire the form they have now; thus, the starting points must either be such that they limit other things, or such that they are not limited in and of themselves, but can be limited by instances of the first type.

B2 appears to take for granted that things-that-are-unlimited are among the starting points. This move might be explained by reference to the fact that many Presocratic cosmogonies presupposed an unlimited, spatially and/or qualitatively indeterminate pre-cosmic mass (cf. Palmer, this volume). This, however, raises the following question: what else is needed so that the ordered cosmos can emerge from this initial indistinct mass? One possible solution is that we need a motive force that initiates changes which will then bring about the currently existing cosmic arrangement. This is the route Anaxagoras chose. Philolaus seems to have taken another avenue. He appeals to our experience of the world, and points out that the world as we know it consists of things that are distinct and marked out by fairly stable contours. There must therefore be things that delimit, and thereby individuate and structure, what was originally indistinct and formless. In so far as things don't just pop into existence, we need to assume that the original ontological furniture of the world contained also things that are capable of limiting those things that are unlimited in and of themselves.

The generation of the cosmos is thus described as the outcome of a process through which things-that-are-unlimited get limited by things-that-are-limiting, and thereby form a third type, a combination of the two primary types. Starting points are therefore primary not only temporally, but also in the sense that instances of the third type can

be analyzed into them. Note, however, that none of this necessitates that instances of the two primary types must themselves be basic. Indeed, B6 also speaks about the combination of things belonging to the same type. If, for instance, we accept that shapes are among the things-that-are-limiting (cf. Barnes 1982: 388), it is easy to see that complex shapes, analyzable into simpler shapes, can also function as limiters.

It is important to note that Philolaus' *archai* are not a pair of abstract metaphysical principles, but a classification of necessary pre-existent things according to a pair of attributes. In conformity with this, he consistently employs the plural in speaking about both primary kinds and the compounds of them.

Philolaus, however, hastens to add that on top of the two primary types we need a further factor to explain the generation of items belonging in the combined category. He calls this further factor *harmonia*. The customary meaning of the Greek word is simply "fitting-together," but by the time of Philolaus it had already acquired the more technical meaning of (musical) harmony. Both the general and the more technical meanings seem to be in play in Philolaus' text. Some commentators call *harmonia* a third principle, but this might be deceptive. For, although a necessary explanatory item, *harmonia* is not on a par with the two primary types. It is not a pre-existent thing, or category of things, but a relation that emerges between pairs of starting points and, as we shall see, also among beings of the third type.

Harmonia appears already in B1 and B2, but its function is described only in B6. As the latter part of B6 explains, it is both a precondition for the combination of specific pairs of the two primary types, and also a force that creates a bond between them, so that the compounds remain steady. This double role might, I suggest, be accounted for in the following way. On the one hand, things that belong in the two primary types must possess certain properties which enable them to combine with certain members of the other kind—not every pairing is possible. On the other hand, when such a pair actually form a compound, their fitting and harmonious combination may create a force that can then hold the compound together. This can explain that some, but not all, possible pairings will result in steady compounds.

Philolaus is apparently very reluctant to identify specific instances of the two primary types. As Huffman has argued (Huffman 1993: 41–2) the most promising text in this respect is B7 describing the beginning of cosmogony:

> The first thing to be fitted together—the one, in the center of the sphere—is called the hearth.

As can be seen from other fragments, the term "hearth" refers to a distinctive item in Philolaus' highly original and bold astronomical system. This is the so-called "central fire" around which the heavenly bodies revolve in ten concentric circles. Starting from the periphery, first come the fixed stars, then the five planets (in the correct order), then the sun and the moon, and finally the earth and a hypothesized tenth heavenly body, the so-called "counter-earth." The "cosmogonic moment," then, is the formation of the central fire around which the whole structure is to develop in the later stages of the process. The fitting together of the central fire apparently involves two components. A certain mass of fire, formless and unbounded in and of itself, receives a definite position and a well-defined shape in the center of the would-be cosmos. By being confined to this specific position and with this specific shape, the central fire is the first distinct, unitary thing to be formed.

The fragment, however, speaks not merely about the birth of *a* thing, or the *first* unitary thing, but appears to call the hearth *the one*. This startling claim is borne out by Aristotle's testimony, according to which the Pythagoreans think that the one and the successive members of the series of natural numbers are constituted through the formation of the astronomical system (cf. *Metaph.* N.3, 1091a13–22; *Ph.* 4.6 213b22–7). We hear for instance that seven is where the sun is—remember that the sun revolves on the seventh concentric circle counting from the outer sphere (Alex. *in Metaph.* 38.20–39.1).

This means that numbers are not instances of the starting-points, but are generated together with the combined type. More precisely, in so far as the central fire *is* also the number one, the numbers are generated *as* the physical beings of the third type. This identification of numbers and cosmological entities appears rather mysterious (for an attempt to save Philolaus from this counter-intuitive thesis, see Huffman 1993: Ch. 2). Malcolm Schofield has nonetheless recently conclusively shown that the evidence is too strong and consistent to be discarded (Schofield 2012). I would argue, moreover, that this is fully congruous also with what Aristotle takes to be the decisive difference between the Pythagoreans and Plato, that is, that in contrast to Plato the Pythagoreans do not separate numbers from things (*Metaph.* A.6, 987b30). If so, the one cannot exist prior to, and independently of, a thing that is one. Therefore, it comes into being together as the first unitary thing—the hearth—comes into being. Note also, that for the Greeks the "numbers" were primarily *that* which one counted, not *by what* one counted. If so, insofar as the constituents of the cosmic structure were the first unitary things to come into being, and thus make up the first countable plurality, it becomes less surprising that the numbers are thought to emerge through the cosmogonical process. This consideration might also explain a further reason why Philolaus posited ten heavenly bodies apparently on *a priori* grounds: he might have considered not only that this is necessary for the perfection of the cosmic system, but found it important also that the basic set of numbers emerge in the same—cosmological—context.

Even if this reconstruction is along the right lines, we would still need an explanation of the relationship between the cosmological (first instantiations of) numbers, and the later instantiations of them in other collections of things and in arithmetic. All the metaphysical differences notwithstanding, an examination of this question might of course be of particular interest for a Platonist in his attempts to work out the relationship between Platonic forms and instantiations of the relevant properties. Note moreover that if, following Barnes and Huffman, we accept that shapes were among the pre-existent limiters, we have to face the following question: how could shapes exist before limiting something, that is before being the shapes of something?

In B6a, apparently a direct continuation of B6, Philolaus gives a detailed account of the diatonic scale in terms of numerical ratios. There is some evidence that here Philolaus could be drawing on the results of Hippasus, who is the first to be credited with a physically feasible method of showing that the numerical ratios 2:1, 3:2, and 4:3 correspond to the fundamental musical intervals of the octave, the fifth, and the fourth respectively. According to Aristoxenus (fr. 90 Wehrli), Hippasus created four bronze disks of equal diameters, and of different thicknesses corresponding to the above numerical ratios; when struck, such disks can actually produce the appropriate concords.

At any rate, Philolaus explicitly takes these ratios to be instances of *harmonia*. We have seen that B6 ends by claiming that *harmonia* is necessary for building up the cosmic order. We have also seen that the numbers that enter into the ratios are to be

understood cosmologically. It is therefore tempting to take the musical scale to apply to the interrelations among the structural elements of the astronomical system, either the heavenly bodies or possibly the concentric orbits of them. This view might naturally be developed into the famous theory of the "music of the spheres," although it is not certain that Philolaus himself actually subscribed to it.

This reconstruction is noteworthy for other reasons as well. We originally understood fitting-together as a relation between pairs of instances of the two primary types—fitting-together was necessary to combine the two different characters. Here, however, the numerical ratios that express the relation between the elements of a harmonious musical scale hold between items of the same type: pitches or the constituents of the astronomical system, which themselves are combinations of limiters and things-that-are-unlimited. If so, fitting-together appears to be a more complex issue. It does not merely enable pairs of instances of the two primary types to combine, but also ensures that the compounds thus formed enter into a fitting relation to other compounds. The structural parts of the astronomical system can be stable not only because they are individually fitting combinations, but also because they are in a harmonious relation with one another, and thus jointly build up a stable structure. This consideration at the same time reinforces the connection between things and numbers. If the prime example of fitting-together is musical concordance expressible in numerical ratios, then it is fundamental to a thing's relation to other things what number that thing is or has. B4 shows that numbers have a key epistemological role as well:

> And indeed all the things that are known have number. For it is not possible that anything whatsoever be understood or known without this.

Note that Philolaus does not speak about "being a number": he does not seek to identify things that are knowable with numbers. It remains however unclear what Philolaus exactly means by "having number" and how this is a precondition of acquiring knowledge of a thing. One possibility might be that the cosmos is knowable because and to the extent that its constituents form a structure expressible in terms of numerical ratios. At any rate, an important consequence of the view is that insofar as numbers are posterior to the two primary types, instances of the primary types will not be knowable. We can perceive instances of fire, and we might even have knowledge of the heavenly bodies as combinations of chunks of fire and limiters, but we cannot know what fire itself is. The fact that numbers are posterior to the primary types might well be the reason behind the epistemological stricture in the first sentence of B6 (for a different interpretation of the epistemological role of number, see Nussbaum 1979).

Limitations of space prevent us from discussing the ways in which Philolaus applies the theoretical framework of the starting-points, *harmonia*, and number to other topics, such as embryology and psychology. Hopefully, the above will suffice to indicate that Philolaus can offer a fresh take on standard Presocratic themes by the application of these central explanatory concepts. On the other hand, these very concepts are documented in the wider Pythagorean context. For instance, his cosmology and epistemology might be considered as an unpacking, in terms of Presocratic cosmology, of *akousmata* we have already mentioned: "What is the wisest? Number" and "What is the finest? *Harmonia*." Similarly, Philolaus' two starting-points are clearly connected to the so-called Table of Opposites that Aristotle explicitly ascribes to a different school of Pythagoreans and which comprises the following pairs: limit–unlimited, odd–even,

one–plurality, right–left, male–female, resting–moving, straight–curved, light–darkness, good–bad, square–oblong (*Metaph.* A.5, 986a22–26). It is crucial to see, however, that Philolaus introduces and applies all these concepts by way of arguments and not as pieces of a Pythagorean catechism.

Eurytus, reportedly Philolaus' disciple, carried on his teacher's project of establishing connections between things and numbers by a strikingly elementary method. According to Archytas' testimony (Theophr. *Metaph.* 6a18–22), Eurytus set out a certain number of pebbles and declared that *this* is the number of human being, and *that* is the number of horse. Aristotle's reference to Eurytus' practice (*Metaph.* N.5, 1092b9–13) indicates that this was conceived as an extension of the mathematical method by which we can define a geometrical figure by a fixed number of points arranged in a specific way. Three points arranged in a certain way is necessary and sufficient to define a triangle, four to define a quadrangle, and so forth. Eurytus could then ask how many points (represented by pebbles) will be needed to define human being and how many will define horse (Guthrie 1962: 274).

Note however that Eurytus was not merely concerned with *images* of horses and human beings defined by dots (as in the "connect the dots" puzzles in children's magazines), but with the things themselves. His procedure therefore reveals a considerably more robust theoretical position, probably inherited from Philolaus, and according to which (types of) physical beings are—and can be treated—on the same footing with geometrical figures. Eurytus could think along the following lines: All agree that such spatially extended objects as triangles, quadrangles, tetrahedra, and so forth, can be defined by a specific number of points arranged in a certain way. Indeed, this is *the* way to define them. If so, one should also accept that other spatially extended objects, such as horses and human beings, can and should have a specific number, that is, the number of points by which they can be demarcated in a similar way. At this point, Eurytus' project starts to appear much less inane than it originally did. For in order to refute it, the opponent needs to come up with a substantive theory about the difference between geometrical and physical objects to show why we cannot apply the same method to horses and human beings that we apply to triangles and cubes.

Neither source says that Eurytus wanted to *define* horse or human being simply by a number; Aristotle and Theophrastus agree that all he said was that *this* is the number of human being, and *that* is the number of horse. This formulation does not hinder that more than one (type of) thing has the same number; after all even in geometry 8 is the number of both the octahedron and the cube. Indeed, we do have evidence that the Pythagoreans (we don't know exactly who) had no qualms ascribing the same number to different things. For instance, 3 could be the number of whole, of the heaven, of the male, and of opinion (Aristotle *Metaph.* A.8, 990a27–29). The inclusion of opinion also shows that not only physical objects had numbers. In the case of non-physical things, the determination of their number could operate along a different logic. Thus, 5 could be the number of marriage, because 3 is the number of male, whereas 2 is the number of female, and 4 could be the number of justice because it is the first square number.

It is a further question what the epistemic gain of determining in this way the numbers of things. Thus once we have fixed, by different methods, that both *A* and *B* has the number *n* (or is *n*), will it tell us anything about the relationship between *A* and *B*? And if we establish further that C has the number *m*, will the mathematical relationship between *n* and *m* tell us anything about the relationship between *A*, *B*, and C? This is where things become hopelessly muddy.

The specific way in which Eurytus sought to carry on Philolaus' project is ultimately a dead end. Yet, Philolaus' scheme could spark more promising and progressive results as well, as is shown by the remarkable scientific achievements of Archytas, apparently also one of Philolaus' disciples (Cic. *Orat.* 3.34.139). Literary sources remember him primarily as the one who saved Plato when his life was in peril at the court of Dionysus II, the tyrant of Syracuse. Yet, just as importantly, Archytas was undoubtedly one of the most impressive scientific minds and political figures of his age. As an outstandingly successful military leader, he had considerable influence also on the political life of his native Tarentum, a major political and military power in Southern Italy. At the same time, Archytas' scientific results in geometry, music theory, and optics have been hailed by scientists and historians of science, both ancient and modern. In particular, his brilliant solution to the "Delian problem"—that is, determining the length of the side of the cube the volume of which is the double of a given cube—has been lauded as one of the finest mathematical achievements of antiquity.

In the first of his four preserved fragments, Archytas expresses his credo by praising the epistemic power of the four "sister" sciences, astronomy, geometry, the science of numbers, and music theory. This list is echoed, with the addition of stereometry, in the educational curriculum of the guardians in Plato's *Republic* (*Resp.* 530d) and will be known in the middle ages as the *quadrivium*. In B4, however, Archytas singles out one science, *logistikē*, which, as he argues, is fundamental to other sciences, including geometry. Huffman has maintained that this science is identical with the science of numbers from B1 (Huffman, 2005: 68–76). There are nonetheless reasons to think that *logistikē* is the science of proportion and ratio more generally, applicable in all four of the sister sciences. (For one, Archytas' solution to the Delian problem is built on ratios between quantities.) Archytas' interest in ratios is obviously most palpable in his harmonic theory, in particular in his famed proof that superparticular ratios (that is, of the form $n+1:n$) cannot be divided into two equal parts. This is a crucial result in so far as the ratios in the Philolaic diatonic scale are precisely of this form. There are, moreover, clear indications that Archytas took proportion, and more broadly analogy, as explanatory to a wide range of phenomena from an account of natural motion to meteorology and to law (Arist. [*Probl.*] 16.9 915a25–32; *Rh.* 3.11 1412a11–18; *Metaph.* H.2 1043a14–26 with *Top.* 1.18 108b24–7). He also seems to have built his ethics and social theory on the distribution of goods according to due proportion (B3).

Reliable ancient sources call Archytas a Pythagorean, thus we have reason to think that he ascribed to the Pythagorean way of life and accepted the central Pythagorean tenets, including the transmigration of the soul. But this has left no noticeable trace on anything that we know about his intellectual achievements. Yet, by seeing him against the backdrop of Philolaus, we can point out the continuities and the recurrence of such themes as number, proportion, and harmony. Yet again, however, there is no evidence that Archytas made much use either of Philolaus' two starting-points (*contra* Huffman 2005: 66–7) or, more generally, the Pythagorean Table of Opposites. Similarly, the somewhat hazy Philolaic *harmonia* has been replaced by a more properly mathematical application of ratios on the one hand, and the use of analogy as a heuristic device on the other. Finally, Archytas' solution to the doubling of the cube might seem to be the most dazzling scientific result issuing from this intellectual context. Yet it is a telling fact that Archytas also in that specific case was building on the results of Hippocrates of Chios, a non-Pythagorean mathematician, who had already shown that the geometrical problem can be reduced to finding two mean proportionals between a given quantity and its dou-

ble. Working with proportions and ratios was thus not a prerogative of Pythagoreans. On the other hand, a Pythagorean disciple of Philolaus might have been particularly intrigued and inspired by problems and solutions involving ratios as instances of an all-encompassing structuring feature of the world.

The only pupil of Archytas about whom we have any knowledge is Eudoxus of Cnidus. In his case, we don't even have any clear evidence whether or not he was a Pythagorean; what we do know, however, is that he was the most remarkable mathematician and astronomer of his generation. The Philolaus–Archytas–Eudoxus succession conveys with particular sharpness how the Pythagorean element gradually fades out of the intellectual achievements of this line of the tradition.

As far as we can see from the available evidence, Archytas was not much interested in cosmology. (He is only noted in this sphere for his powerful thought experiment arguing for the infinity of the cosmos: "If I arrived at the extremity of the heavens, can I extend my arm or staff into what is outside, or not?" (Eudemus fr. 65 Wehrli).) On the other hand, Philolaus' program of introducing number into a Presocratic type of cosmology, his insistence that numerical ratios that also express musical harmonies create bonds between the elements of the physical world, as well as the idea that shapes can impose limits upon an intrinsically formless material continuum, were taken up by Plato who built them into the imposing and tremendously influential edifice of the *Timaeus*. Nevertheless, Plato's cosmological account starts with, and is founded on, an emphatic distinction between the created physical world and eternal, non-physical realities that can function as starting points. In a similar manner, Philolaus' two pre-existent types are clearly in the background of the theory of principles in Plato's *Philebus*, roughly contemporary with the *Timaeus*. But, once again, Philolaus' things-that-are-limiting and things-that-are-unlimited are replaced by the abstract metaphysical principles of the Limit and the Unlimited. The new phase of Pythagoreanism was born when Plato's disciples started to claim that the separation of layers of reality and positing a pair of abstract ultimate principles are not the innovations of Plato, but belong to the very core of Pythagoreanism.

The Derveni papyrus

Although not part of the Pythagorean tradition, a number of structural and thematic features connect this fascinating but baffling document to our topic. The text, completely published only recently (Kouremenos et al. 2006), was preserved on a charred papyrus scroll that was discovered in 1962, near Thessaloniki, among the remains of a pyre on which a well-to-do Macedonian was cremated sometime around the end of the fourth century BC. The first columns, even more fragmentary than the rest, give a rationalistic explanation of a series of rites, sacrifices, and libations that presumably formed part of a funerary ritual, and offer an account of various eschatological agents that can punish or help the soul of the deceased. The mention of initiates—who are said to follow the practices of *magoi* (either Persian priests or Greek religious practitioners who claim their authority from their Persian colleagues)—points to the context of mystery religions. In the second, longer part of the extant text, we get an elaborate allegorical interpretation of a hymn in hexameter to Zeus. The poem focuses on the way Zeus obtained royal power among the gods with the help of the primordial goddess Night, but also makes reference to the succession of divine kings preceding Zeus, and to the later phases of Zeus' reign. Some peculiar details of the story are known from later

versions of the Orphic theogony, such as the bizarre episode according to which in order to make his dominion stable, Zeus had to swallow the primary source of generation (a primeval divinity called Phanes, or the phallus of Ouranus) so that by this act all the divinities prior to him get inside his belly, from which he can then bring them to light again. The author of the papyrus asserts that in this seemingly outlandish narrative Orpheus effectively reveals the most important truths, yet expresses himself in riddles that only a few will understand (Col. 7). The Derveni author himself is, of course, in a position to unravel Orpheus' real meaning; the outcome of his verse-by-verse exegesis is a cosmological theory that integrates elements from different Presocratic theories from Heraclitus to Anaxagoras and Diogenes of Apollonia, but is not without originality (Betegh 2004: Ch. 7–9). In particular, the author argues that all the divine characters of the poem are just names of a single cosmic god and designate the different cosmological functions and actions of this one god. In its physical aspect, the god can also be identified with the element air that is at the same time the bearer of intelligence, and is able to manipulate the brute, motive force of fire.

None of the various attempts at identifying the Derveni author with known figures of the late Presocratic period has received wider acceptance. More striking, interpreters also disagree on the professional identity and basic aims of the author. For some, he is a sophist who wants to display his interpretational ingenuity without any ideological agenda (Obbink 2010: 19). For others, he is a natural philosopher who strives to dissipate the superstitious eschatological beliefs of the adepts of mystery religions, and offer a naturalistic and secular interpretation of a text considered to be sacred by them (Kouremenos 2006). For yet others, he is one of those priestly figures who, in Plato's words, try to "make it their concern to provide an account of their practices" (*Meno* 81a) and offer a teaching about the fate of the soul. If this last interpretation is correct—as I am inclined to think—then when the Derveni author endeavored to render the sacred text of Orpheus compatible with the latest intellectual movements, he was doing something comparable with what at least some Pythagorean philosophers were doing: they took a set of enigmatic texts that they considered to come from a semi-divine figure, an utmost authority in religious and cosmological matters, and tried to make sense of them in the paradigm of Presocratic natural philosophy.

At any rate, the allegorical exegesis of Orphic poems remained a live form of philosophizing until the very end of the Greek philosophical tradition. What is more, in the eyes of the late Neoplatonists, Orpheus was not merely an authority equal, or almost, to Pythagoras and Plato; they were convinced also that these three sages professed one and the same divine wisdom. Syrianus, Proclus, and Damascius wrote formidable treatises to demonstrate that in those curious episodes relating the family life of gods, explicated also by the Derveni author, Orpheus expressed exactly the same intricate metaphysical system that Pythagoras taught to his disciples in Croton and Plato wrote about in his splendid dialogues.

References and further reading

Barnes, J. (1982), *The Presocratic Philosophers*, London: Routledge.

Betegh, G. (2004), *Derveni Papyrus: Cosmology, Theology and Interpretation*, Cambridge, Cambridge University Press.

Burkert, W. (1972), *Lore and Science in Ancient Pythagoreanism*, E. Minar (trans.), Cambridge, MA: Harvard University Press, 1st German edn. (1962).

Guthrie, W. K. C. (1962), *A History of Greek Philosophy*, Vol. 1, Cambridge: Cambridge University Press.

Huffman, C. A. (1993), *Philolaus of Croton: Pythagorean and Presocratic*, Cambridge: Cambridge University Press.
—— (2005), *Archytas of Tarentum: Pythagorean, Philosopher and Mathematician King*, Cambridge: Cambridge University Press.
—— (2008), "Heraclitus' Critique of Pythagoras' Enquiry in Fragment 129," *Oxford Studies in Ancient Philosophy*, 35 19–47.
——(2010), "Pythagoreanism," *The Stanford Encyclopedia of Philosophy (Summer 2010 Edition)*, E. N. Zalta (ed.), available at http://plato.stanford.edu/archives/sum2010/entries/pythagoreanism/.
—— (2011), "Pythagoras," *The Stanford Encyclopedia of Philosophy (Fall 2011 Edition)*, E. N. Zalta (ed.), available at http://plato.stanford.edu/archives/fall2011/entries/pythagoras/.
Kahn, C. (1992), "Vlastos' Socrates," *Phronesis* 37: 233–58.
——(2001), *Pythagoras and the Pythagoreans*, Indianapolis, IN: Hackett.
Kouremenos, T., Parássoglou, G. M. and Tsantsanoglou, K. (2006), *The Derveni Papyrus. Edited with Introduction and Commentary*, Studi e testi per il "Corpus dei papiri filosofici greci e latini," Vol. 13, Florence: Casa Editrice Leo S. Olschki.
Nussbaum, M. (1979), "Eleatic Conventionalism and Philolaus on the Conditions of Thought," *Harvard Studies in Classical Philology* 83: 63–108.
Obbink, D. (2010), "Early Allegory" in R. Copeland and P. T. Struck (ed.) *The Cambridge Companion to Allegory*, Cambridge: Cambridge University Press 15–25.
Riedweg, C. (2005), *Pythagoras: His Life, Teaching and Influence*, Ithaca, NY, and London: Cornell University Press.
Schofield, M. (2012), "Pythagoreanism: Emerging from the Presocratic fog (*Metaphysics*A 5)", in C. Steel (ed.) *Aristotle, Metaphysics A*, Oxford: Oxford University Press: 141–66.
Thessleff, H. (1965), *The Pythagorean Texts of the Hellenistic Period*, Åbo: Åbo Akademi.
Zhmud, L. (1998), "Some Notes on Philolaus and the Pythagoreans," *Hyperboreus* 4: 1–17.
—— (2012), *Pythagoras and the Early Pythagoreans*, Oxford: Oxford University Press.

Related chapters

1. The world of early Greek philosophy
15. Plato's metaphysics
43. Porphyry and Iamblichus

7
THE SOPHISTS

Noburu Notomi

What is a "Sophist"?

The word sophist

Professional intellectuals and teachers called *sophists* (*sophistēs* / pl. *sophistai* in Greek) appeared in the Greek World in the latter half of the fifth century BC and continued into the Roman Empire (the so-called Second Sophistic era). Since history treats the Sophists as part of an intellectual movement, we must first ask who they were, before discussing what each individual Sophist thought or taught. In this chapter, I focus on the earlier Sophists, namely, those of the fifth and fourth centuries BC.

We normally consider Protagoras of Abdera (ca. 490–415/411 BC) the first Sophist (cf. *Suda* P.2958, Diog. Laert. 9.51–54). In Plato's dialogue *Protagoras*, Protagoras claims that he first used this title for his own profession, while "disguised sophists" had preceded him, including poets (Homer, Hesiod, Simonides), mystics (Orpheus, Musaeus), medical doctors, and gymnastic and musical teachers (*Prt.* 316d–317c).

The Greek word *sophistēs* derives from *sophos* (wise) and applied to such wise men as Solon and Pythagoras (Hdt. 1.29, 4.95). According to ancient testimony (Isoc. *Antidosis* 235, and later, Aelius Aristides: cf. DK 79.1), the two words *sophos* and *sophistēs* were originally synonyms, but we know the latter word had developed a derogatory connotation even during the earliest period. Aeschylus' *Prometheus Bound* calls the protagonist a sophist in a contemptuous sense, meaning clever man; the word signifies an expert in skills of cunning devices and tricks. The word's pejorative use dominated in the tragedies and comedies, in particular, in Aristophanes' *Clouds* (423 BC), in which Socrates represents the Sophists.

How do we know about the Sophists?

We have scarce information about the Sophists of the fifth century BC and other earlier sophists, in contrast to the information we have on Plato, Xenophon, Isocrates and Aristotle, whose works are well preserved. We have only a small part of the Sophists' work cited by later authors (fragments) and some reports of their lives, writings and thoughts (testimonies), all collected in the second volume of *Fragmente der Vorsokratiker* (Diels and Kranz 1952; some are also collected in Graham 2010). Editions of the testimonies of a few particular sophists have improved (Gorgias in Buchheim 1989; Antiphon in Pendrick 2002; Prodicus in Mayhew 2011; Protagoras partly in Capizzi 1955), but we still need updated and fuller editions of the other Sophists.

Reports of the earlier Sophists come down to us from various sources. The main contemporary testimonies hail from Aristophanes, Xenophon, Plato, Isocrates and Aristotle. Yet Plato's dialogues stand out as providing us with information far more substantial than the others. Later in the Roman period, Diogenes Laertius introduced Protagoras in the *Lives of Eminent Philosophers*, Book 9; Flavius Philostratus introduced Gorgias, Protagoras, Hippas and Critias in the *Lives of Sophists*; the skeptic Sextus Empiricus examined the doctrines of Gorgias and Protagoras; and the teacher of rhetoric Dionysius of Halicarnassus often mentioned Gorgias and Thrasymachus. The ancient lexicographers Harpocration and Pollux collected some rare words and phrases used by Antiphon and Critias. With the collapse of the Roman Empire, the professional Sophists disappeared, and with them went their work and their history. Hence, history forgot them.

Here, we should bear in mind that later authors had different intentions and partial interests in only some Sophists. Since many authors repeated their predecessors' words with little care and often from memory, most fragments have been transmitted without their original contexts, and we often find the testimonies unreliable in general. Many anecdotes appear as free and often malicious fictions. Accordingly, their reliability as historical sources differs enormously. These features make any attempt at reconstruction of the Sophists' thoughts extremely difficult.

On the other hand, we do have a few extant works written by the Sophists themselves. In addition to the two epideictic works of Gorgias, namely, *Encomium of Helen* and *Defense of Palamedes* (which I shall discuss later), two anonymous treatises have survived. One, the sophistic argument called *Dissoi Logoi*, presents opposing arguments on such ideas as good and bad, beautiful and ugly, just and unjust, and true and false (Robinson 1979). We suppose that some Sophist of the fifth or fourth century BC (under Protagoras' influence) wrote this treatise, and it remained preserved in the manuscript of Sextus Empiricus. Also, Iamblichus' *Protorepticus* contains another treatise of ethics and politics by another sophist ("Anonymous Iamblichi"). Finally, large papyrus fragments of Antiphon's *On Truth* turned up in the Egyptian desert at Oxyrhynchus (as we will see later). In contrast to these earlier writings, we do possess more works of the fourth century sophists, namely that of Isocrates and Alcidamas.

Concerning the sources, we should keep two important points in mind. First, whereas the majority of the Sophists' works remain lost to us, Plato, their severest critic, gives us the most vivid and detailed accounts of their thoughts and activities. While we have predominantly negative images of the Sophists, we cannot be too cautious about the bias of the sources. Second, although the Sophists' thoughts seem inferior in contrast to the extensive works of Plato and Aristotle, this may not reflect their quality and quantity. As active teachers, the Sophists may not have considered writing treatises as their main job (see Gorgias and Alcidamas), and thus however much impact their live lectures and performances may have caused in the contemporary audiences, they did not survive. By contrast, although Socrates, like many Sophists, did not write down his work, nevertheless, his pupils, namely Plato, Xenophon and other Socratics reported much of it. Therefore, we should consider the essence and importance of the Sophists' thoughts and activities in the extant works and testimonies by taking all of these conditions into account.

Who were the Sophists?

The ancient lists of Sophists typically include Protagoras of Abdera, Gorgias of Leontini, Hippias of Elis, Prodicus of Ceos, Polus of Acragas and Thrasymachus of

Chalcedon, all of whom feature in Plato's dialogues. We now call these "the Older Sophists" (Diels and Kranz 1952; Sprague 1972). On the other hand, the Sophists of the next generations (active in the fourth century BC), namely Polycrates, Alcidamas, Lycophron, Bryson, and Isocrates, scarcely count as major Sophists. Even the ancient writers rarely mentioned the first generation Sophist Antiphon, because Plato simply ignored him. This underscores the fact that we understand the Sophists as Plato's dialogues represent them.

Plato ranks the Sophists in stark contrast with the philosopher Socrates. However, as seen in Aristophanes, his contemporary Athenians regarded Socrates too as a major Sophist (we shall take up this point again later). Moreover, Isocrates probably targeted Plato in his criticism of earlier and contemporary Sophists. Also, Aelius Aristides reported that Lysias referred to both Plato and Aeschines of Sphettus as Sophists. These testimonies cast serious doubt on there being a distinct *group* of Sophists, particularly as distinguished from the philosophers. The appellation *sophist*, used widely, even included some philosophers. On the other hand, Plato's *Meno* reported that Gorgias did not call himself a Sophist for the reason that he did not "teach virtue" (DK 82 A21). Therefore, the mere use of the title does not necessarily provide us with a safe criterion for treating the Sophists as a single group.

Moreover, some scholars suggest that we cannot discuss the Sophists as a group on the grounds that they engaged in different activities and showed quite different, often contrary, features. The subjects dealt with by the Sophists range from mathematics and natural sciences to history, ethics, law, politics, psychology, religion, linguistics and literary criticism. They shared no doctrines or common grounds, nor did they establish schools, as did Plato with his Academy or Epicurus with his Garden. On the contrary, they competed seriously and criticized each other. In Plato's *Protagoras*, three great Sophists, Protagoras, Hippias and Prodicus, often exchanged sarcastic comments in lectures to their followers. This rivalry or antagonism marks a distinct feature of Sophistic activities. Each Sophist wanted to dissociate himself from other Sophists; each wanted to stand out as a true thinker and educator and considered the others useless shams. Again, this attitude may prevent us from seeking unity of the Sophists as a group. Therefore, we should consider whether and how to identify the Sophist.

How Plato and others saw them

The Sophist became a philosophical topic when Plato drew a clear contrast between Socrates and the Sophists: while the philosopher seeks the truth and encourages living well, the Sophist deceives young people with empty words and inserts amoral thoughts into their minds. In the Platonic dialogues, Socrates proved himself a true philosopher by refuting the Sophists.

In his later dialogue, *Sophist*, Plato finally defined the Sophist as a false imitator of the wise (cf. Notomi 1999). His followers accepted this negative characterization and took it for granted. For example, Aristotle considered the Sophist "one who makes money from apparent but not real wisdom" (*Soph. el.* 1, 165a22–23). In the *Sophist* and other dialogues, Plato illuminated several essential features of being a Sophist:

1. to profess to teach virtue;
2. to capture rich young people as their pupils;
3. to charge fees for their teaching;

4. to travel around Greek cities without settling in one place;
5. to show skill at speaking, which involved deception; and
6. to claim to know many subjects (polymathy) rather than confining one's study to a specific area.

Following Plato, the word *sophist* came to mean a bogus philosopher or a dangerous educator who destroyed the foundation of morality and society. We should remember, however, that generally the populace of antiquity did not accept this negative evaluation. Plato's intellectual contemporaries, notably Isocrates and the later rhetoric teachers of the Roman Empire proudly referred to themselves as Sophists.

Modern Europe, where the professional Sophists no longer existed, treated the Sophists as deceitful thinkers of pretended knowledge excluded from philosophy. It was G. W. F. Hegel who revived the negative status of the Sophists in the dialectical development of Greek philosophy (*Lectures on the History of Philosophy*): he regarded them as subjectivists who provided the subsequent stage of Socrates' philosophy. In this way, a positive evaluation of the Sophists appeared in the history of philosophy. German historians such as Eduard Zeller and Wilhelm Nestle took up Hegel's view of philosophy; however, this tradition viewed the sophists as functioning in a type of pre-history or preparation for real philosophy. Hence, the Sophists' negative image lived on.

George Grote, on the other hand, appreciated the Sophists as important thinkers (Grote 1884: Vol. 8, ch. 67). He suggested treating each Sophist separately, not collectively. Following this, George Kerferd promoted the significance of the Sophists in the history of philosophy (Kerferd 1981a). This approach treats them as thinkers, as important and as original as the Ionian, Italian and Athenian philosophers.

Friedrich Nietzsche praised the Sophists as heroes of anti-philosophy. When he criticized Socrates and Christianity as the source of slave-morality, he ascribed the origin of the critique of morals to the Sophists (*Will to Power* 428). This reversal of the contrast also appears in Karl Popper, a severe critic of Plato's totalitarianism and one who appreciated the Sophists' free and open way of thinking. For Popper, Protagoras and Gorgias promoted egalitarian humanism (Popper 1945). Likewise, Eric Havelock saw Protagoras as a hero of Greek civilization who defended democracy and who anticipated relativism and pluralism (Havelock 1957).

Historically, philosophy has ignored or despised the Sophist; at times it has treated Sophism positively, at other times, negatively. Either way, the Sophist has straddled the deep crevasse between philosopher and non-philosopher. But Plato *invented* this contrast in defense of Socrates. Our different views of the Sophists seem to mirror our own individual approaches to philosophy.

A mere label?

One may suppose that the word *sophist* in ancient Greece served as a mere label with which to criticize another. We can compare it with another Greek word *sykophantēs*. This word refers to someone who regularly brings charges to the law court; modern historians, however, doubt the existence of such professionals. They argue that this label may well have been used to attack enemies.

Does the designation Sophist merely serve as a label for criticism? Does it have any substantial reference? If it is a mere label, we should not use it for discussing a group or a certain trend in history. If we believe Plato's distinction between Socrates and the

Sophist, we must look for a certain core to what it means to *be* a Sophist. In this way, we will define and grasp the Sophist's essence and distinguish Sophist from philosopher.

Of the several sophistic features that Plato proposed (mentioned earlier), some seem more suggestive than others. We can consider the third feature, "charging fees for teaching," as a core: for only this concrete fact about Sophists clearly separates them from Socrates (cf. Blank 1985). While charging fees may appear to us a minor charge, Plato often focused on this feature in his criticism of the Sophist. For Plato, it indicated a *professionalism* of the Sophist's teaching. Remember that before the Sophists, Greek intellectuals from Thales and Solon to Anaxagoras and Empedocles, all free citizens, wrote works or taught their ideas freely without charging fees. They produced their thoughts on a purely theoretical basis, and their thoughts seem not to have circulated outside a limited circle of intellectuals. By contrast, the Sophists' professional approach to teaching shocked their contemporary Greeks. They had created a novelty: a profession of intellectual activity within society (cf. de Romilly 1992).

Protagoras, Hippias, Gorgias and others intentionally developed this aspect of sophistry by competing with each other for the teaching fees they charged. By presenting wisdom as commercial goods, they located the value of ideas and teachings within the system of economic exchange. For this notion of commensurability of wisdom and money, Plato most severely condemned the Sophist as the "merchant of learnings" (cf. Nightingale 1995: Ch. 1). If we regard this as a core of the Sophist, we can include most of the traditional Sophists but exclude Socrates and Plato. Now we can confidently include Gorgias among the Sophists as a professional teacher of rhetoric who took fees, although he did not call himself a Sophist.

On the other hand, modern accounts often include Critias (one of the "Thirty") and Callicles on the list of Sophists. Yet, if we adhere to the criterion of professionalism, we can clearly eliminate them as Sophists. Critias, an oligarchic (or philolaconian) political theorist and tragedy writer, who may have been much influenced by the Sophists (remember that he attended the Sophists' lectures in Plato's *Protagoras*), was never a Sophist in the strict sense and was actually never counted as such in the classical period. Critias came to be counted among the Sophists only when Herodes Atticus and, following him, Philostratus, praised him as an excellent author of the Attic style in the Second Sophistic (cf. Notomi 2000). In this tradition, we still include Critias among the Older Sophists (Diels and Kranz 1952), and some even associate his evil deeds with his being a Sophist. Likewise, the young Athenian Callicles, featured in Plato's *Gorgias* (perhaps a fictional figure), was a pupil of the Sophists, but was not a Sophist himself. We must also note that, in order to study the sophistic movement, it is sometimes important to examine these intellectuals (including Euripides and Thucydides) under the Sophists' influence.

Teaching virtue and rhetoric

By seeing professionalism as the core to sophistry, we can encompass various features of the Sophists' activities. The profession of teaching by taking fees became possible only in Greek cities, in particular, democratic Athens, where free male citizens willingly paid much to learn from the Sophists. These citizens actively sought any opportunity to participate in politics, and such opportunities were basically open to able young men in the democracy. They competed with each other to learn virtue (*aretē*) and grow into powerful gentlemen (*kaloikagathoi*) from the wise who professed to teach it, that

is, Sophists. Protagoras proudly announced his profession in this way: "What I teach is sound deliberation (*euboulia*), both in domestic matters—how best to manage one's household, and in public affairs—how to realize one's maximum potential for success in political debate and action" (Pl. *Prt.* 318e–319a, trans. S. Lombardo and K. Bell).

The Sophists professed to teach virtue as a response to social demand. Although Socrates and Plato raised the philosophical question of the teachability of virtue (Pl. *Prt.*, *Men.*), it seems that the sophists succeeded considerably and obtained great reputations throughout many Greek cities, where people welcomed them. Young people, fascinated by their lectures, willingly paid a large amount of money to take their courses. Plato vividly depicted such enthusiasm in many dialogues.

What did they actually teach in their lectures, if teaching virtue is problematic in the philosophical sense? Since *virtue* meant the social and political ability to survive and flourish in a democratic society, teaching it must have offered the skills to make this possible. One main skill they taught, the art of speech (*tekhnē logōn*), came to be called the art of rhetoric (*rhētorikē*: cf. Schiappa 1991). Athens and other cities required their citizens to speak in public, namely in the council, assembly, law courts and festivals. Also, becoming a powerful statesman required the ability of public speech or even eloquence, but still, those less active in politics needed this ability when summoned to the court by another's charge. The ability to defend oneself or to accuse one's enemy meant social survival. For this, specialists taught basic skills in public speech and sometimes actually how to write a draft for forensic speech. Also, since virtue does not confine itself to any technical sphere, the art of rhetoric ideally served as a single art to deal with *all subjects* (cf. Pl. *Grg.*).

We have reports that Gorgias learned from Tisias, a legendary founder of rhetoric in Syracuse. When he visited Athens in 427 BC, his idiosyncratic style soon spread throughout the city. Protagoras also taught the art of rhetoric and invented a method of arguing in opposite ways. Such skills as defending and refuting the same thing served useful functions in society. Thus, the art of rhetoric became a centre of the Sophists' teaching. Initially, the main Sophist teaching concerned public speech and a lecture. But some Sophists later mastered argument in the question–answer form. Plato's *Euthydemus* presents a funny discussion of the Sophist brothers, Euthydemus and Dionysodorus of Thurii, who tried to ask tricky questions and refute the answerer. This type of discussion they called eristic (*eristikē*), and it became an important part of the Sophist's art.

In Athens, professional speech-writers (*logographoi*) such as Lysias actively practiced their skills. As masters of rhetoric, they earned money by composing speeches for others, but in a crucial difference from the Sophists, they did not *teach* the art by taking fees. Therefore, while rhetoricians and Sophists sometimes overlapped, not all rhetoricians were professional Sophists.

The Sophists taught their students not only the format of a speech, but also the content of various topics required to make a good speech. They developed insight into language itself and the careful consideration of human emotions for this purpose. Moreover, general education became an important part of sophistic teaching. Dealing with all kinds of things and therefore being wise in all things became a catch-phrase of the Sophists' profession. In this respect, Hippias of Elis, a contemporary of Socrates and known as a polymath, could and would discuss any field including mathematics, astronomy, poetry and music. He collected and compiled historical documents and edited anthologies (cf. Patzer 1986) and took pride in his mnemonic technique.

Although the Sophists did not constitute a single school sharing a set of ideas or a doctrinal framework, we group them together for their professional activities and attitudes toward wisdom and society. Now called the Sophistic Movement, we appreciate them as provocative promoters of new ideas and learning. Indeed, they started several new areas of academic and scientific research, such as linguistics, historiography, rhetoric and political science. Nietzsche is not the only thinker who values them more highly than other philosophers. We shall now examine some main ideas and activities of the sophists.

Teaching and thought

Gorgias' power of speech

Gorgias (ca. 485–380 BC), a citizen of Leontini, a small city in southeastern Sicily, is said to have learned from Tisias and Empedocles, both active in Sicily. In 427 BC, when the neighboring city Syracuse tried to invade Leontini, Gorgias traveled as an ambassador to Athens to call for military support. His speech at the assembly fascinated the Athenians by its novel style. Although he persuaded them, his native city had already fallen. Unable to return to his homeland, he traveled to different regions, including Thessaly and Athens, as a traveling teacher. Ancient testimonies say that, as a major Sophist, he earned a good deal of money and lived a long and happy life, dying when he was over 100 years of age.

Of his works, two epideictic speeches come down to us through medieval manuscripts, namely the *Encomium of Helen* and the *Defense of Palamedes*, the earliest full texts we have of fifth-century thinkers. Also, his philosophical treatise entitled *On What Is Not or On Nature* (*peri tou mē ontos ē peri physeōs*) is summarized both in the Aristotelian (or Peripatetic) treatise, *Melissus, Xenophanes and Gorgias* (MXG), and in Sextus Empiricus' *Against the Logicians* (*Math.* 7).

Gorgias was famous for his ability to speak extempore speech. Philostratus, who called him "the father of the sophistic art" in the *Lives of the Sophists*, reported that Gorgias dared to ask an audience to throw him a subject at the beginning of his public talks (DK 82 A1a). Prepared speech is relatively easy to remember or to read, but speaking on any subject fitting to each occasion (*kairos*) signifies a real skill. Gorgias knew how to retrieve ideas from his stock topics to construct an impressive speech quickly. He mastered and taught an original style using repetition and contrasting words and phrases in a rhythmical way (called Gorgianic style).

Gorgias' speeches spawned enormous praise and fascination among his audience, but they nevertheless failed to attract a larger audience, since they wielded power over the audience alone. Probably for this reason, he circulated his sample speeches in written form. This kind of epideictic speech aimed to attract more people and to recruit pupils, like school pamphlets, by promoting his abilities in speech. The two extant speeches, probably written for this purpose, also contain some important insights into the art of rhetoric.

The *Encomium of Helen* takes the form of a forensic speech in defense of the mythic beauty, Helen of Sparta. Gorgias first proclaims to tell *the truth* and to clear her of her bad reputation, while shading his real intention to promote his own ability to speak well by actual exhibition. In the defense argument, he deliberately appeals to dubious arguments to shake a reader's reason and to rhetorical figures to move his or her emotions. Gorgias saw speech (*logos*) as a device to control others, insisting that it could save or

take a life like a drug (*pharmakon*): "Speech is a powerful ruler. Its substance is minute and invisible, but its achievements are superhuman; for it is able to stop fear and to remove sorrow and to create joy and to augment pity" (*Helen* 7, trans. MacDowell).

This argument, which insists on the power of speech, demonstrates that very power. To defend the innocence of Helen, a mythical figure of whom every Greek knew, must have sounded boldly challenging to the Greeks, and the author exploits this expectation. He finally calls the whole *logos* nothing but a play. When reading it out, a reader or an audience will be enchanted by the author's overwhelming and fanciful power of *logos* (cf. Wardy 1996).

The other epideictic speech we have takes a similar forensic form. This time, the accused person, Palamedes, himself argues against his accuser, Odysseus. The defense enumerates all the possible motivations of the alleged betrayal and all the possible methods and eliminates them one by one. The structure of the argument comes across as rigorous and logical. Greek readers again would have known the original myth, this time the tale of Palamedes, the innocent accused as a traitor. Nevertheless, the author's playful display of over-logicality might increase a reader's suspicion or make him or her uneasy given the extreme cunningness of the speech (cf. Notomi 2012). The reader enjoys it, and thereby is enchanted.

Under the guise of mythical topics, Gorgias aims to persuade readers using the power of *logos*. It actually moves an audience's emotions, but it also shakes the grounds of commonsensical truth. When he insists on telling the truth, we should understand it as rhetorical rather than philosophical or absolute. In the law court, persuasion decides the truth, and therefore possesses real power. Against this, in the *Gorgias* Plato severely criticizes the idea that such mere *logos* has power (Notomi 2007). In this way, Gorgias does not merely teach the skills necessary for the composition of impressive speeches or giving good examples, but he actually investigates speech itself.

Extempore speech continued as an essential of the Sophist's art, but in the early fourth century BC, the followers of Gorgias became aware of the weakness or conflict within this method. Alcidamas of Elaea, an eminent rhetorician most proud of improvisation, wrote a treatise entitled *On Those Who Write Written Speeches or On the Sophists*. In this treatise, he severely criticizes a group of Sophists who rely on writings (for example, Isocrates) and defends the importance of extempore speech. In this period, Isocrates produced many rhetorical works written with extreme care and refinement, exemplary speeches in history, while as Alcidamas feared, his excellent oral speeches were soon forgotten and all lost. In ancient Greece, many Sophists must have specialized in rhetoric, as Alcidamas, whose skills later generations forgot. The writings of philosophers (Plato, Aristotle) and of such Sophists as Isocrates have overwhelmed oral performances.

A parody of Eleatic philosophy?

In addition to the epideictic speeches, Gorgias wrote the more philosophical and more perplexing treatise *On What Is Not*. While controversy lingers over which of the two sources, MXG or Sextus, preserves the original discussion more faithfully, we can reconstruct a general frame of the argument. The author probably gave the work the title *On What Is Not* to compete with Melissus, who called his treatise *On Nature or On What Is* (DK 30 A4; cf. A2). However, Gorgias actually contends here that there is *nothing* (*ouden*) instead of *what is not* (*to mē on*). This clearly results from the first of the three proofs, which goes as follows: if there is something, either *what is* or *what is not* (or both)

is; however, it is denied that either of them is; therefore, nothing is. The second proof holds that, even if there is something, it is unknown. Then, the third proof concludes that, even if it is known, it cannot be transmitted to others.

Gorgias structures a strictly logical argument. First, he enumerates possible conditions in each case. The first and main argument starts with the conditional statement that "If there is something, it is either *what is*, or *what is not*, or both" (Sext. Emp. *Math.* 7.66). In this case, the three options are exhaustive, but in some other places, the enumeration seems imperfect. Second, the author tries to reject each option by *argument ad absurdum*. For example, if there is *what is not*, it follows that it at once is and is not, since it *is* what is not, and it is what *is not*; but it is absurd that something at once is and is not; therefore, there is no *what is not*.

The frequent use of Eleatic arguments recurs as one remarkable feature of the treatise. In each argument, the author makes use of stock arguments from other thinkers, particularly Parmenides, Zeno of Elea, Melissus and Leucippus. For example, in examining the eternity of being, the author argues that if it is eternal, it has no beginning and therefore is infinite; if it is infinite, it is nowhere. This reminds us of Melissus' notorious argument (DK 30 B3), often criticized as fallacious. Then, it follows that if it is nowhere, it *is not*. This argument most certainly comes from Zeno's reasoning on space (DK 29 A24). And there are other sections that similarly use or imply Eleatic arguments.

Because of its logical appearance, scholars often take the treatise to contain the author's serious philosophical doctrine. Accordingly, Gorgias is sometimes called *nihilist*, or counted among the Eleatics. We must, however, be cautious about his intention. When he uses the philosophical arguments (often weak or problematic ones), it seems unlikely that he commits himself to these claims. In that case, the argument as a whole may well be totally destructive or a playful parody. When the final proof concludes that it cannot be transmitted to others, the author must himself be aware that this very claim is self-contradictory: if this claim is true, we, readers, cannot understand this, or if we understand, this thesis is proven wrong. This raises a radical doubt about the seriousness of the author's argument. But what does serious intention matter? Parmenides, Zeno, Melissus and others had already forwarded plenty of paradoxical claims, which annihilate our ordinary conceptions, in all seriousness. Gorgias raises questions against philosophy by making playful fun. He is reported to have invented a method of "ridiculing a serious opponent" (DK 82 B12). His argument seems to target the seriousness of philosophy.

Modern philosophers tend to separate Gorgias' work into two groups, rhetoric and philosophy, and some scholars (notably Diels 1884) have located them in two different stages of his life. Yet, these two phases should be considered interrelated to constitute a single activity of the Sophist Gorgias.

Protagoras, the first sophist

We have seen how Plato features Protagoras in his *Protagoras*. Although it is much debated how much of the famous Great Myth (320c–328d) originally came from Protagoras, we naturally expect the dialogue to represent some essential features and ideas of the Sophist Protagoras. In the later dialogue, *Theaetetus*, Socrates examines Protagoras in combination with Heraclitus' flux theory. There, we see his thesis presented more philosophically, examined and eventually refuted.

What we modern readers know about him comes mostly from the dialogues of Plato, but the situation was not much better for the ancient people. The works of Protagoras

seem to have disappeared soon after his death. He is said to have written a handful of treatises, but we know only some titles (Diog. Laert. 9.55). Furthermore, quotations or citations from his works are surprisingly scarce. We possess only two fragments in a strict sense: one, the famous "Man-measure thesis" (DK 80 B1) originally appearing at the beginning of his book *Truth* (or *The Throws*), and the other, a notorious agnostic statement (B4), again located in the opening of his book *On Gods* (*Peri theōn*). Ancient authors repeatedly mentioned these two passages, certainly without the original books in hand. For the "Man-measure thesis," Plato's *Theaetetus* remained the main source of interpretation, and ancient writers just followed in the tradition. Accordingly, it is impossible to determine the original size and content of these books. One suspects that this hopeless scarcity of testimonies may partly be due to the public burning of his books in the Athenian *agora*, as a result of his impious claim in *On Gods* (Diog. Laert. 9.51–52).

Protagoras is the only Sophist whose biography was included both in Philostratus and in Diogenes Laertius. This means that he was treated as philosopher *and* Sophist in antiquity. In addition, the biographical account by Hesychius of Miletus, preserved in *Scholia Platonica* AD *Rep.* 10 600c (A3), and the article in *Suda* provides us basic information about his thought and activities. They include some anachronistic information, for example, the report of Protagoras as a pupil of Democritus, the atomist philosopher from his hometown. But this false story must have come down to us from an insulting comment by Epicurus two centuries later (cf. Notomi 2013). We do not know his life well, despite his reputation as a radical thinker.

Generally speaking, biographical reports at least show the wide range of his interests and activities (including making laws for the new city of Thurii). He studied and taught rhetoric, logic, linguistics, anthropology, religion, epistemology, law, politics and ethics. Teaching virtue was his main profession, and some attribute contributions to mathematics to him.

Antilogic and relativism

Protagoras, the first Sophist who took fees, read his writings aloud in public places and in private homes. No doubt Protagoras also engaged in rhetoric, as did Gorgias. But as far as we know from the testimonies, he was interested not so much in styles or figures of speech as in its theories. He is said to have distinguished four basic forms of speech (namely, wish, question, answer and command), and discussed the "division of time" (often interpreted as verb tenses) and genders of nouns and adjectives (Diog. Laert. 9.53–54). Prodicus of Ceos, famous for his succinct distinctions on words, shared an interest in language with Protagoras. Plato has Socrates say that he learned from Prodicus (by attending his inexpensive lectures). Both Protagoras and Prodicus set up the study of language and grammar.

Protagoras is also said to be the first to maintain that there are two sides to every question, opposed to each other (Diog. Laert. 9.51). This method of antilogic (counter argument) is useful, particularly in the forensic context, where one has to argue well both in defence and in attack. Under this influence, the eristic sophist Dionysodorus boldly comments that "whichever way the boy answers, he will be refuted" (Pl. *Euthd.* 275e). Antilogic relates to another Protagorean claim that there is no contradiction, for if there is no contradiction between opposite claims, one can argue well on both sides. If this implies that the same statement is true for one side but false for another, it leads to

the famous "Man-measure thesis": "Man is the measure of all things: of things that are, that they are, and of things that are not, that they are not" (DK 80 B1).

This statement opens his book *Truth* (or according to Sextus, *The Throws*), but because of the lack of its original context there are several different interpretations of what Protagoras intended by it (cf. Guthrie 1969/1971). "Man" may refer to human beings as a genus (in contrast with other animals), or individual human societies or each individual man. Also, "things" may be matters of fact, or values, or both. Plato in the *Theaetetus* explicates the thesis as indicating that each thing appears different for different persons: for instance, the same wind may feel cold to me but warm to someone else.

Although this individual relativism became a standard interpretation after Plato and Aristotle, Protagoras may have been defending democracy by this thesis, as advisor for Pericles. Each society can posit its own norms and values. If this is the case, social or cultural relativism may serve as a better interpretation.

In the history of philosophy, we regard Protagoras as the founder of relativism, but controversy lingers on his thesis and relativism in the modern sense (in terms of conceptual frameworks; cf. Zilioli 2007). It is less probable that the other Sophists claim any form of strong relativism (cf. Bett 1989). Since Plato's *Theaetetus*, philosophers have discussed whether the "Man-measure" thesis commits any kind of self-refutation (cf. Burnyeat 1976a, 1976b), and, accordingly, Protagoras has become a focus of epistemology (cf. Lee 2008, Castagnoli 2010).

The "Man-measure" thesis, understood in the context of Athenian democracy and forensic rhetoric, definitely challenged traditional values and ways of seeing the world. We no longer turn to the gods when we refer to law, custom, and moral judgments; now human beings deliberate and decide what to do. In a sense, this marks a radical departure from traditional religion, which regarded the Olympian gods as the absolute source of morality. New trust in human capability comes to be criticized as impious and as anti-philosophy by conservative citizens and by Plato.

Enlightened views of gods

The other fragment of Protagoras passed down to us comes from the book *On Gods*. Again, we have only the first statement. Plato and Aristotle did not cite this passage (only alluded to it in *Tht.*162d–e = DK 80 A23), and the citations vary in ancient writers so that we must reconstruct the original statement mainly from Diogenes Laertius and Eusebius: "As for the gods, I cannot know either that they are or that they are not, or what they look like. For there are many obstacles that keep me from knowing these, both the obscurity of the question and the shortness of human life" (DK 80 B4, slightly revised, cf. Notomi 2008). This bold claim of the unknowability of the gods shocked ancient people, even if the anecdotes of the burning of his books, his trial for impiety, banishment and unfortunate death are later fictions or exaggerations. Late antiquity regarded Protagoras as a dangerous atheist, together with Prodicus, Critias, and Diagoras of Melos.

Differing from Protagoras' agnostic view, which does not deny (or affirm) the existence of gods, Prodicus and Critias announced a rationalistic view of religion, based on the development of human civilization and society. As for the Sophist Prodicus, we can read his masterpiece "The Choice of Heracles" (Xen. *Mem.*2.1), which encourages young people to choose a life of virtue and labor, instead of that of vice and pleasure.

From this perspective, Prodicus seems committed to traditional or conservative morality. Yet he advances the rationalistic view that useful things and the men who designed them were regarded as gods. Sextus Empiricus introduces the following thesis of Prodicus: "The ancients accounted as gods the sun and moon and rivers and springs and in general all the things that are of benefit for our life, because of the benefit derived from them, even as the Egyptians deify the Nile" (*Math.* 9.18, cf. 9.51–52, trans. Bury).

Prodicus is said to have related Demeter to bread, Dionysus to wine, Poseidon to water and Hephaestus to fire. In general, he insisted that religious ceremonies and the idea of gods had been generated in the human race from these things (cf. Notomi, 2010b).

Critias, albeit not a Sophist in a strict sense (as shown earlier), achieved notoriety for the bold claim that some clever men invented fear of the gods so as to frighten people away from committing evil deeds and violence. The (lost) tragedy *Sisyphus* expressed this idea. Apart from the controversy over its authorship—it is sometimes attributed to Euripides—it is not immediately clear whether we can attribute the statement of the persona in the play (Sisyphus, a mischievous king) to the author himself. But whatever Critias himself believes, the bold statements shake traditional obedience to the law and gods. The idea of religion as a human device for social control or sanction thus represents the radical side of the sophistic movement.

Nomos vs. Physis

The rationalistic reflection and doubt on religion relates closely to the reconsideration of the basis of social and moral values, traditionally ascribed to the gods. The Sophists' interest in human affairs and society developed through the growing knowledge of different cultures and natures. Herodotus' *Histories* contains abundant new information about remote places and exotic cultures. Certain customs and traditions observed in one society may be seen differently, sometimes even avoided or hated, in another. Given this background, the famous distinction of *nomos* and *physis* evolved and became popular.

The Greek word *physis* means nature, and the earlier thinkers used it for the title of many works. "Inquiry into nature" became a catch phrase of Ionian philosophy. *Nomos* originally meant allotted order, but we now translate it as law or custom. In the earlier period, as in Heraclitus, *physis* normally includes morality and social customs. Later, *nomos* began its separation from *physis*, and the Sophists often contrast the two. *Nomos* initially implied a positive evaluation of human progress in civilization, but later came to have a more negative meaning, as opposed to nature.

The opposition between *physis* and *nomos*, and its corollary idea of the social contract became popular in the last decades of the fifth century BC (cf. Kahn 1981), but we cannot easily determine who originated these ideas. The contrast appeared in Hippocrates' treatises, and the tragedies made much use of it. Its introduction was once ascribed to Archelaus, a natural thinker who stayed in Athens (DK 60 A2), and the atomist Democritus also used it for his epistemology. Its origin is ascribed to Protagoras (Heinimann 1945/1980) or Prodicus, but our major source of this idea comes from Plato's dialogues. Hippias openly appeals to this contrast: "I regard all of you here present as kinsmen, intimates, and fellow citizens by nature, not by convention. For like is akin to like by nature, whereas convention, which tyrannizes the human race, often constrains us contrary to nature" (*Prt.* 337c–d). Further, Callicles, the young follower of Gorgias, forwards a radical view of natural justice by appealing to the *nomos–physis* contrast.

Antiphon left the most substantial and radical arguments on this topic. Researchers have identified a few large fragments of papyrus (discovered in Oxyrhynchus on the basis of a fortunate matching with one citation in Harpocration's lexicon) as a part of Antiphon's *On Truth* (*POxy*. 1364 fr. 1, fr. 2, 3647, and 1797, now edited in Decleva Caizzi and Basianini 1989, translated and commented by Pendrick 2002). Who this Antiphon is remains controversial. We know the Athenian citizen, Antiphon of Rhamnus, a logographer and teacher of rhetoric (cf. Pl. *Menex.* 236a) who composed several sample speeches (of which the *Tetralogies* are the most important). This Antiphon must be the politician who led the revolution of the Four Hundred in 411 BC but was executed after the collapse of the oligarchic government (recorded in Thucydides). On the other hand, Xenophon has Socrates converse with "the Sophist Antiphon" in the *Memorabilia* (1.6), and some ancient authors distinguished these Antiphons. Accordingly, some modern scholars (notably Pendrick 2002) have distinguished the author of the treatise *On Truth*, that is, the sophist, from the Athenian rhetorician and/or politician. But many others (particularly Gagarin 2002) regard them as identical by rejecting the few ancient testimonies as mere confusion.

Although the whole structure and context of the treatise *On Truth* (two or three books) have eluded us, the surviving fragments offer an argument on the supremacy of nature and injustice (*adikia*) over law and justice. First, the distinction between *nomos* and *physis* is introduced on the basis of some observations of human nature and culture:

> [The laws of the fathers] we know and observe, the laws of those who live far off we neither know nor observe. Now in this we have become barbarians in one another's eye; for by birth, at least, we are all naturally adapted in every respect to be either Greeks or barbarians.
>
> (B44(b) II.1–15, trans. Pendrick, slightly changed)

We human beings are the same in nature. But laws and justice are established later, often against nature: "The laws are imposed, whereas nature is necessary; and the laws are not born but agreed upon, whereas nature is not agreed upon but born" (B44(a) I.23–II.1). The argument goes on to demonstrate that "the majority of what is just according to *nomos* is hostile to *physis*" (B44(a) II.26–30). Laws and customs order our physical faculties what to do and what not to do; for example, they tell the eyes what to see and what not to see. While nature advances free advantages and pleasures, laws constrain nature.

Since *nomos* imposes justice, it goes against natural advantages. Harm by nature is a matter of reality or truth (*alētheia*), in contrast to harm by opinion (*doxa*). Therefore, the violation of laws does not harm the person if he escapes the notice of other people. The author appeals to the actual situations of Athenian courts, where someone who accuses others of injustice in the order of laws will suffer various disadvantages. The accused will revenge the accuser, but the laws will not give the latter any help. Although these examples perhaps seem exaggerated, they may come from the actual experiences of the author as an expert in forensic oratory.

A similar argument against justice as *nomos* appears in Plato's *Republic*, Book 2, where the interlocutor Glaucon reformulates the criticism of justice initially given by the Sophist Thrasymachus. He argues that justice is an advantage for the strong (therefore, someone who does justice is to be exploited and suffer disadvantage). While

Thrasymachus does not use the *nomos–physis* contrast, Glaucon insists that people obey justice only for *nomos*, or social contract, so as to avoid being harmed by the stronger. His appeal to the contrast may well come from the ordinary view of the Athenians, but since it has much in common with Antiphon's arguments and phraseology, commentators suggest that Plato uses his brother as a shadow of Antiphon (cf. Vegetti 1998, Pendrick 2002, Notomi 2010a).

The formidable and challenging arguments against our customary justice by Thrasymachus, Glaucon and Callicles symbolize the amorality and danger of the Sophists' teaching. Although Plato and Aristotle made fundamental criticisms of these thoughts, the idea of justice as product of the social contract (*nomos*, not *physis*) becomes a standard view in modern philosophy.

Challenge to philosophy

Plato severely criticized the Sophists mainly to defend his master Socrates by dissociating this true philosopher from other sham thinkers. We must remember that the ambiguous suspicion and hatred of the Sophists caused the trial of Socrates in 399 BC. "Corrupting the youth" and "introducing novel deities" were common charges against the new education of the Sophists (cf. Aristophanes' *Clouds*). Actually Socrates had much in common with his contemporary Sophists: his concern for the education of young people, in particular, care for the soul, encouraging the virtues, art and skills of *logos* (*elenchus*, dialogue), and the critical examination of common sense. Socrates must have appeared to the Athenians as the most formidable Sophist, and ironically, he was the only one who was executed as being a dangerous Sophist.

Plato's strategy of dissociating Socrates from the Sophists becomes clearer when we compare it with the ways the other Socratics, such as Xenophon, Aeschines, Antisthenes and Aristippus, treated Socrates and the Sophists. Unlike Plato, they did not care much about the contrast in defending Socrates, but instead, some of them lived professional lives as Sophists (cf. Notomi 2010c). In contrast to his colleagues and rivals, Plato tried to secure philosophy by showing the correct method of *logos* (called *dialektikē*), engaging in search for absolute truth, and awareness of ignorance by *elenchus*.

As for the *nomos–physis* contrast, Plato's *Republic* and Aristotle' *Politics* tried to reject the basic opposition, and to demonstrate that justice and laws should derive from and be based on nature. Plato declared in the *Laws* that "God is the measure of all things" (716c). In this way, the Sophists urge Plato and other thinkers to defend philosophy.

Thus, the Sophists certainly constitute an intellectual movement, which contributed to the history of philosophy by raising fundamental questions of philosophy. Their challenge keeps philosophy alive. This may well be why modern philosophy (in particular, post-modernism) has revived them. We should consider philosophy and the sophistic movement not as separate trends but as a dynamic duo that encourages philosophical thinking.

References and further reading

References

Bett, R. (1989), "The Sophists and relativism," *Phronesis* 34: 139–169.
Blank, D. L. (1985), "Socratics versus Sophists on payment for teaching," *Classical Antiquity* 4: 1–49.

Buchheim, T. (1989), *Gorgias von Leontinoi, Reden, Fragmente und Testimonien*, Hamburg: Felix Meiner.
Burnyeat, M. F. (1976a), "Protagoras and self-refutation in later Greek philosophy," *Philosophical Review* 85: 44–69.
Burnyeat, M. F. (1976b), "Protagoras and self-refutation in Plato's *Theaetetus*," *Philosophical Review* 85: 172–195.
Capizzi, A. (1955), *Protagora, Le testimonianze e I frammenti, edizione riveduta e ampliata con uno studio su la vita, le opere, il pensiero e la fortuna*, Firenze: G.C. Sansoni.
Castagnoli, L. (2010), *Ancient Self-Refutation: The Logic and History of the Self-Refutation Argument from Democritus to Augustine*, Cambridge: Cambridge University Press.
Decleva Caizzi, F. and Bastianini, G. (1989), "Antipho," in *Corpus dei Papyri Filosofici Greci e Latini* I.I*, Florence: L. S. Olschki: 176–236.
Diels, H. (1884), "Gorgias und Empedokles," *Sitzungberichte der preussischen Akademie*: 159–184; repr. In his *Kleine Schriften zur Geschichte der antiken Philosophie* (1969), Darmstadt: Wissenschaftliche Buchgesellschaft.
Diels, H. and Kranz, W. (1952), *Die Fragmente der Vorsokratiker*, II, 6th edition, Dublin / Zürich: Weidmann.
Gagarin, M. (2002), *Antiphon the Athenian, Oratory, Law, and Justice in the Age of the Sophists*, Austin: University of Texas Press.
Graham, D. W. (2010) *The Texts of Early Greek Philosophy. The Complete Fragments and Selected Testimonies of the Major Presocratics, Part II: Sophists*, Cambridge: Cambridge University Press.
Grote, G. (1884), *A History of Greece; from the earliest period to the close of the generation contemporary with Alexander the Great, a new edition in twelve volumes*, London: John Murray.
Guthrie, W. K. C. (1969/1971), *A History of Greek Philosophy III, The Fifth-Century Enlightenment*, Cambridge: Cambridge University Press; repr. Part 1, *The Sophists*, Cambridge: Cambridge University Press.
Havelock, E. A. (1957), *The Liberal Temper in Greek Politics*, New Haven, CT: Yale University Press.
Heinimann, F. (1945/1980), *Nomos und Physis, Herkunft und Bedeutung einer Antithese im griechischen Denken des 5. Jahrhunderts*, Basel/Darmstadt: Wissenschaftliche Buchgesellschaft.
Kahn, C. H. (1981), "The origins of social contract theory in the fifth century BC," in G. B. Kerferd (ed.) (1981b): 92–108.
Kerferd, G. B. (1981a), *The Sophistic Movement*, Cambridge: Cambridge University Press.
Kerferd, G. B. (ed.) (1981b), *The Sophists and Their Legacy*, *Hermes* 44, Wiesbaden: Franz Steiner Verlag.
Lee, M.-K. (2008), *Epistemology after Protagoras: Responses to Relativism in Plato, Aristotle, and Democritus*, Oxford: Oxford University Press.
MacDowell, D. M. (1982), *Gorgias, Encomium of Helen, edited with introduction, notes and translation*, Bristol: Bristol University Press.
Mayhew, R. (2011), *Prodicus the Sophist, Texts, Translations, and Commentary*, Oxford: Oxford University Press.
Nightingale, A. W. (1995), *Genres in Dialogue: Plato and the Construct of Philosophy*, Cambridge: Cambridge University Press.
Notomi, N. (1999), *The Unity of Plato's* Sophist*: Between the Sophist and the Philosopher*, Cambridge: Cambridge University Press.
Notomi, N. (2000), "Critias and the origin of Plato's political philosophy," in T. M. Robinson and L. Brisson (eds.), *Plato: Euthydemus, Lysis, Charmides*, Sankt Augustin: Academia Verlag: 237–250.
Notomi, N. (2007), "Plato's Critique of Gorgias: Power, the Other, and Truth," in M. Erler and L. Brisson (eds.), *Gorgias-Menon: Selected Papers from the Seventh Symposium Platonicum*, Sankt Augustin: Academia Verlag: 57–61.
Notomi, N. (2008), "Fragment and tradition of Protagoras, *On gods*," *Philologica* 3 (in Japanese): 24–47.
Notomi, N. (2010a), "Glaucon's challenge," in A. Bosch-Veciana and J. Monserrat-Molas (eds.), *Philosophy and Dialogue, Studies on Plato's Dialogues*, Vol. II, Barcelona: Barceonesa d'Editions, Societat Catalana de Filosofia: 35–50.
Notomi, N. (2010b), "Prodicus in Aristophanes," in S. Giombini and F. Marcacci (eds.), *Il Quinto Secolo: Studi di filosofia antica in onore di Livio Rossetti*, Perugia: Aguaplano: 655–663.
Notomi, N. (2010c), "Socrates versus Sophists: Plato's invention?," in L. Rossetti and A. Stavru (eds.), *Socratica 2008, Studies in Ancient Socratic Literature*, Bari: Levante Editori: 71–88.
Notomi N. (2012), "Gorgias' use of logic and rhetoric," *Papers on Rhetoric* XI: 190–199.
Notomi, N. (2013), "A protagonist of the Sophistic movement? Protagoras in historiography," in J. M. van Ophuijsen, M. van Raalte and P. Stork (eds.), *Protagoras of Abdera: The Man, His Measure*, Leiden: Brill: 11–36.

Patzer, A. (1986), *Der Sophist Hippias als Philosophiehistoriker*, Freiburg und München: Verlag Karl Alber.
Pendrick, G. J. (2002), *Antiphon the Sophist, The Fragments*, Cambridge: Cambridge University Press.
Popper, K. R. (1945), *The Open Society and Its Enemies*, London: Routledge.
Robinson, T. M. (1979), *Contrasting Arguments: An Edition of the Dissoi Logoi*, New York: Arno Press.
Romilly, J. de (1992), *The Great Sophists in Periclean Athens*, translated by J. Lloyd, Oxford: Oxford University Press.
Schiappa, E. (1991), *Protagoras and Logos: A Study in Greek Philosophy and Rhetoric*, Columbia, SC: University of South Carolina Press.
Sprague, R. K. (ed.) (1972), *The Older Sophists, a complete translation by several hands of the fragments in Die Fragmente der Vorsokratiker edited by Diels-Kranz and published by Weidman Verlag, with a new edition of Antiphon and of Euthydemus*, Columbia, SC: University of South Carolina Press.
Untersteiner, M. (1954), *The Sophists*, translated from the Italian by K. Freeman, Oxford: Basil Blackwell.
Vegetti, M. (1998), "Commento [A] Glaucone," Platone, *La Repubblica*, II, Naples: Bibliopolis: 151–172.
Wardy, R. (1996), *The Birth of Rhetoric: Gorgias, Plato and Their Successors*, London: Routledge.
Zilioli, U. (2007), *Protagoras and the Challenge of Relativism*, Aldershot: Ashgate.

Further reading

Bons. J. A. E. (2010), "Gorgias the Sophist and early rhetoric," in I. Worthington (ed.), *A Companion to Greek Rhetoric*, Malden, MA: Wiley-Blackwell: 37–46.
Broadie, S. (2003), "The Sophists and Socrates," in D. Sedley (ed.), *The Cambridge Companion to Greek and Roman Philosophy*, Cambridge: Cambridge University Press: 73–97.
Cassin, B. (ed.) (1986a), *Le plaisir de parler, études de sophistique compare*, Paris: Editions de Minuit. (A collection of articles.)
Cassin, B. (ed.) (1986b), *Positions de la sophistique*, Paris: Vrin. (A collection of articles.)
Cassin, B. (1980), *Si Parmenide, La traité anonyme De Melisso Xenophane Gorgia, edition critique et commentaire*, Cahiers de Philologie 4, Lille: Presses Universitaires de Lille.
Classen, C. J. (ed.) (1976), *Sophistik*, Darmstadt: Wissenschaftliche Buchgesellschaft. (A collection of articles.)
Cole, T. (1991), *The Origins of Rhetoric in Ancient Greece*, Baltimore, MD and London: Johns Hopkins University Press.
Decleva Caizzi, F. (1999), "Protagoras and Antiphon: Sophistic debates on justice," in A. A. Long (ed.), *The Cambridge Companion to Early Greek Philosophy*, Cambridge: Cambridge University Press: 311–331.
Edwards, M. (2010), "Alcidamas," in I. Worthington (ed.), *A Companion to Greek Rhetoric*, Malden, MA: Wiley-Blackwell: 47–57.
Ford, A. (1993), "Platonic insults: Sophistic," *Common Knowledge*, Fall 1993 V2 N2, 33–48.
Gagarin, M. and Woodruff, P. (eds.) (1995), *Early Greek Political Thought from Homer to the Sophists*, Cambridge: Cambridge University Press.
Gomperz, H. (19685), *Sophistik und Rhetorik, das Bildungsideal des EU LEGEIN in seinem Verhältnis zur Philosophie des V. Jahrhunderts*, 2. Neudruck der Ausgabe Leipzig 1912, Aalen: Scientia.
Kerferd, G. B. (1955–56), "Gorgias on nature or that which is not," *Phronesis* 1: 3–25.
Kerferd, G. B. (1981c), "The future direction of Sophistic studies," in G. B. Kerferd (ed.) (1981b): 1–24.
Lloyd, G. E. R. (1987), *The Revolutions of Wisdom: Studies in the Claims and Practice of Ancient Greek Science*, Berkley and Los Angeles, CA: University of California Press.
Mariß, R. (2002), *Alkidamas: Über diejenigen, die schriftliche Reden schreiben, oder über die Sophisten, Eine Sophistenrede aus dem 4. Jahrhundert v. Chr. eingeleitet und kommentiertt*, Münster: Aschendorff Verlag.
Mazzara, G. (1999), *Gorgia, La Retorica del Verosimile*, Sankt Augustin: Academia Verlag.
Migliori, M. (1973), *La filosofia di Gorgia*, Milan: CELUC.
Muir, J. V. (2002), *Alcidamas, The Works & Fragments, edited with introduction, translation and commentary*, Bristol: Bristol University Press.
Nehamas, A. (1990), "Eristic, antilogic, sophistic, dialectic: Plato's demarcation of philosophy from sophistry," *History of Philosophy Quarterly* 7: 3–16.
Newiger, H.-J. (1973), *Untersuchungen zu Gorgias' Schrift Über das Nichtseiende*, Berlin, New York: Walter de Gruyter.
Pradeau, J.-F. (ed.) (2009), *Les Sophistes*, 2 vols, Paris: Flammarion.
Rademacher, L. (1951), *Artium scriptores (Reste der voraristotelischen Rhetorik)*, Österreichische Akademie der Wiessenschaften, 227/3, Vienna: Rudolf M. Rohrer.

Schiappa, E. (1999), *The Beginnings of Rhetorical Theory in Classical Greece*, New Haven, CT and London: Yale University Press.
Sidgwick, H. (1872), "The Sophists," *Journal of Philology* 4: 288–307.
Untersteiner, M. (1967), *I sofisti, I, II*, Milan: Lampugnani Nigri Editore.
Vander Waerdt, P. A. (ed.) (1994), *The Socratic Movement*, Ithaca, NY: Cornell University Press.
Woodruff, P. (1999), "Rhetoric and relativism: Protagoras and Gorgias," in A. A. Long (ed.), *The Cambridge Companion to Early Greek Philosophy*, Cambridge: Cambridge University Press: 290–310.

Related chapters

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8
SOCRATES: SOURCES AND INTERPRETATIONS

Jenny Bryan

Introduction

There are several basic facts that we like to think we know about Socrates. Most obviously, he was an Athenian who, having lived through the Peloponnesian War, was indicted for impiety and corrupting the young and put to death in 399 BC. We also know that he had an enormous influence on those who met him: the writings of Plato, Xenophon and Aristophanes all emphasize his power to attract both followers and enemies. He exercised a longstanding influence on the history of philosophy, most famously on Plato but also on other Socratics and later schools of philosophy such as the Stoics and Cynics, who claimed Socrates as one of their own. In fact, everything we think we know about Socrates is taken from what other people have to say about him, for he himself seems to have written nothing. Faced with a lack of first-hand evidence as to his activities and philosophy, scholars have sought to reconstruct an historical Socrates from the writings of these others. In part, this endeavor is motivated by pure intellectual curiosity to know the truth about this influential figure. For scholars of Plato in particular, however, it is motivated by the desire to understand the extent of Socrates' philosophical impact on Plato's thinking. It is also, we might think, a natural reaction to the diversity of the texts described in this chapter. Each presents a particular version of Socrates and, when we compare these, we find both agreement and, perhaps more often, significant disagreement. The question of how we approach these similarities and differences and whether it is possible to find the real Socrates behind these texts, the so-called "Socratic Problem," is one that continues to vex scholars of ancient philosophy. (Dorion 2011 gives a useful summary of the history of the Socratic Problem.)

Aristophanes' *Clouds*

Of the various sources for our knowledge of Socrates, Aristophanes' comic play *Clouds* is the only one that we know to have been produced during Socrates' lifetime. It was first performed in 423 BC but, after a poor reception (it came last in its competition), Aristophanes revised it and it is this revised version that we possess. *Clouds* is not the only comedy to feature Socrates. He is also mentioned in passing in both Aristophanes'

Frogs (1491) and *Birds* (1554) and seems to have been parodied by another comic poet, Ameipsias (in his *Konnos*, which was placed higher than *Clouds* in the same competition). Such appearances suggest that, by 423 BC, Socrates was well-known enough in Athens to be a suitable target for popular parody.

The fact that *Clouds* is a comedy inevitably affects the way we approach it as a source of information about the historical Socrates. In comedy, we expect both the grain of truth that ensures that a parody hits its target (and this is all the more to be expected from Aristophanes' politically and socially engaged plays) and the exaggeration and distortion that aim at producing laughter. So, in reading *Clouds*, those interested in Socrates must think very hard about whether and how one can identify truths in amongst the jokes.

Clouds presents the story of an old man called Strepsiades who is driven to desperation by his son Pheidippides' gambling debts. He contrives to send Pheidippides to Socrates' school (the *Phrontistērion* or "Thinkery") to learn the kind of sophistic tricks that will allow him to talk his way out of his troubles (the play features an extended debate between the personified "Stronger Argument" and "Weaker Argument," won by the latter). Pheidippides refuses and, enrolling himself, Strepsiades begins his own education under Socrates. When Socrates rejects Strepsiades as an inept student, Pheidippides reluctantly takes his place. Strepsiades soon comes to regret his son's educational progress, when Pheidippides assaults his father and offers an argument in support of his right to do so. Strepsiades exacts his revenge on Socrates by setting fire to his school.

Aristophanes' Socrates is a ridiculous figure. Much is made of his unkempt appearance and failure to wear shoes (although it is notable that no mention is made of his notorious ugliness). Socrates makes his first entrance swinging in a basket, observing the heavens and talking apparent nonsense. His pupils are so devoted to him that they mimic his ascetic appearance as well as his general behavior. This Socrates does not believe in the traditional gods of Athens and induction into the school is presented as something akin to initiation into a mystery cult (Dover 1971: 52). Two aspects of this portrayal have attracted the most attention (and criticism). First, Aristophanes' Socrates is presented as a Sophist. He teaches for a fee and the education he provides is, in part, precisely the kind of rhetorical trickery that we are told (by Plato) was the specialty of Sophists like Protagoras and Gorgias (on the Sophists, see Notomi in this volume). Second, he has an extensive interest in natural philosophy, from studying meteorology to ascertaining whether gnats speak through their mouth or their backside.

This combination of sophist and natural philosopher attributes to Socrates interests that are explicitly denied to him by Plato and Xenophon. Plato in particular goes to great lengths to stress the distance between Socrates' interest in moral truth and what he characterizes as the sophistic preference for rhetorical expediency. He also has Socrates state explicitly that he does not teach and that he does not take payment for his conversations (*Apology* 19d). With regard to his interest in the natural world, Plato has Socrates claim that, after some unsuccessful dabbling in natural philosophy, he set aside such inquiries in favor of moral ones (*Phaedo* 96a–100a). In Plato's *Apology*, Socrates explicitly criticizes the suggestion that he shares the interests of natural philosophers such as Anaxagoras (26d–e). Xenophon has Socrates reject natural philosophy in rather stronger terms, dismissing the "foolishness" of those who pursue such interests (*Mem.*1.1.11). Given these significant discrepancies between Aristophanes and our later sources, along with the fact that Aristophanes is engaged in comic distortion, many have succumbed to the temptation to dismiss Aristophanes' version of

Socrates as entirely lacking in historical or philosophical verity. On this reading, *Clouds* offers nothing more than an ill-informed caricature of Socrates as a figure-head for and conflation of new intellectual trends to which, in truth, he did not subscribe (see, for example, Kahn 1996: 72).

Others, however, have sought to rehabilitate *Clouds* as presenting a rather more accurate, perhaps even philosophically-informed, critique of Socrates. So, for example, Paul Vander Waerdt has sought to defend *Clouds*' portrayal of Socrates as a natural philosopher as directed at the period of his life described in the *Phaedo*, when he was apparently engaged in inquiries into nature (Vander Waerdt 1994). Others have identified hints of an awareness of Socratic method (as described in Plato and Xenophon) in the play. So, for example, some have found references to *elenchus* in Socrates' interactions with his pupils (see Nussbaum 1980). It has even been suggested that the play's chorus of clouds is a parodic representation of the guiding inner voice, or *daimonion*, that Socrates speaks of in the writings of both Plato and Xenophon (Edmunds 1985).

Perhaps the most uncontroversial approach to Aristophanes' Socrates and, in particular, to the way that he seems to be "a hodge-podge of intellectual pursuits, from eristic argumentation to speculation about the gods, astronomy, meteorological phenomena, biology, poetry, and grammar" (Konstan 2011: 85), is to read Aristophanes as intentionally using Socrates as an easily recognizable figure in which to conflate these elements. That is to say that the primary target of Aristophanes' critique is not Socrates himself, but the intellectual elite that he represents. The fact that the historical Socrates may not have shared and indeed seems to have criticized the views and interests of the Sophists and natural philosophers is not Aristophanes' concern. His central aim is to criticize an intellectual collective of which he perceived Socrates to be a member and which he seems to have believed to be undermining traditional Athenian morality. In this respect, Aristophanes' portrayal of Socrates may not be so far off the mark. For, if we believe Plato's insistence that Socrates was not a Sophist, we must surely also accept that Socrates did move in sophistic circles (if only to criticize) and that he was a rival for the attentions of the same group of aristocratic young men. It is plausible that, to an outsider, it would be not only difficult but of no interest to grapple with the philosophical nitty-gritty of the difference between Socrates and the Sophists. It was perhaps enough to know that, like the Sophists, Socrates had a clear interest in virtue and its teachability. This is not to say that Aristophanes misunderstood Socrates, but rather that he did not care to understand him further than as a member of this controversial circle of intellectuals.

For those interested in Socrates' philosophical beliefs and methods, Aristophanes may seem to offer little. This does not justify dismissing his version of Socrates as entirely false or as having nothing to say to those who want to understand the influence and significance of Socratic thought. In fact, those who prefer to take their cue from Plato in such matters have a very good reason to think about *Clouds*. In his *Apology*, Plato has Socrates single *Clouds* out as prominent source of the popular ill-will and misunderstanding that led to his indictment for impiety and corrupting the youth (*Ap*.18d and 19c; see also Xenophon *Oec*.11.3). Bearing in mind that *Clouds* placed last in its competition, this is a particularly intriguing accusation. Nevertheless, it suggests that the perception of Socrates we find in *Clouds* as a potentially dangerous buffoon and peddler of novel theories was widely held (whether prior to or as a result of his lampooning in *Clouds*). It may be that, as Plato claims, this perception was founded on a misunderstanding, but it seems clear that, whatever Socrates was up to, it was easily misconstrued

in this fashion. In particular, it indicates that the distance between Socrates and the Sophists and natural philosophers was rather harder for a layman to grasp than for someone possessed of Plato's subtlety of mind and philosophical concerns.

Plato's Dialogues

Plato is, without question, the preeminent source for our knowledge of Socrates. Almost everything we think we know about Socrates' philosophy, we take from Plato. Even those details of Socrates' biography that we tend to think we can be pretty certain of, such as the extent of his involvement in political life, his military record, or his physical appearance, we take, in the main, from Plato (with a little help from Xenophon). Nevertheless, the degree to which Plato's Socrates is historically or philosophically accurate remains an issue of debate. Certainly, the majority of scholars are inclined to trust Plato's account above any other. Nevertheless, when faced with arguments in favor of taking Plato's Socrates as, to whatever degree, an account true to his historical namesake, the careful reader must always bear in mind the context in which such claims are made. Plato's Socrates is by far the most philosophically interesting and sophisticated version of those we find in the ancient sources. So perhaps it is no surprise that those who are primarily interested in Socrates' (and Plato's) philosophy will be more inclined both to prefer him and to find him to be real. One scholar has even suggested that Plato's Socrates is "the only Socrates worth talking about" (Vlastos 1971: 2). In fact Plato's characterization of Socrates presses us to consider his historicity (Nehamas 1999a). For if, as Plato repeatedly indicates, Socrates is a figure who lived and died by his philosophy, it should matter to us whether he really did live such a life and die such a death. If he did not, this would seem to undermine the Socratic project and persona represented in the dialogues.

One of the difficulties of talking about Plato's Socrates is that he seems to have multiple identities. On the one hand, his personality, appearance and general activities, as characterized across the Platonic corpus, are pretty uniform. This is particularly true of the kind of reaction that he provokes in his interlocutors, which is usually either fascination or irritation. On the other hand, both the way that he engages with interlocutors and the kinds of things he says varies across the dialogues. So, for example, Socrates sometimes seems unable or unwilling to offer his own views but elsewhere seems happy to introduce relatively complex and dogmatic suggestions. On occasion, he says things that are directly inconsistent with views he has voiced elsewhere in the corpus. In considering the accuracy of Plato's version of Socrates, we have to face up to the question of how we are to deal with such inconsistencies.

There is a widespread (but far from generally accepted: see Kahn 1996 and Rowe 2007) view that it is possible to separate the genuinely Socratic elements of Plato's Socrates from those that are Plato's own invention. One suggestion, set out most influentially by Gregory Vlastos, is that it is possible to identify a group of "Socratic" dialogues, written early in Plato's career, in which Plato is reproducing genuinely Socratic philosophy (Vlastos 1991: 45–106). Vlastos suggests that, in those dialogues written later, when Socrates seems to grow more dogmatic and to voice innovative views on psychology or metaphysics, he is being used as a mouthpiece for Plato's own developing philosophy (see Long in this volume).

The question of which dialogues should be classed as Plato's "Socratic" works is an object of some disagreement in itself but it is relatively standard to include at least the

following: *Charmides*, *Crito*, *Euthyphro*, *Hippias Minor*, *Ion*, *Laches*, and *Apologia*. As we will see, the *Apologia* has a special status within this group but the other "Socratic" works are taken to be unified by the fact that, in each of them, we see Socrates employing a method of question and answer (known as *elenchus*) to draw out and scrutinize the views of his interlocutor on some question of morality (see Woolf in this volume). Socrates often seems to be seeking for a satisfactory definition of a moral term, such as courage in the *Laches* or piety in the *Euthyphro*. These conversations always end without such a satisfactory definition having been identified. Socrates himself often explicitly denies that he is a teacher or that he possesses knowledge on such significant questions. Nevertheless, he does seem to hold certain, apparently innovative, positions on the nature of virtue and these appear with enough frequency within this group of dialogues that they have come to be known as "Socratic Paradoxes."

Views differ on precisely what counts as a Socratic Paradox, but they seem to cluster around three basic positions. First, that virtue is knowledge, that is, that knowledge is sufficient to guarantee virtuous behavior. Second, and connected, the claim that the virtues are unified ("Unity of the Virtues"). Third, that no one willingly does wrong. This latter position is often referred to as Socrates' denial of *akrasia* (weakness of will). There is a further methodological paradox at the heart of Socrates' activities in these "Socratic" dialogues, namely his disavowal of wisdom (see, for example, *Ap.*21b). Plato's Socrates is endlessly enigmatic and fascinating, but it is these paradoxes, along with his interest in definitions and his use of *elenchus*, which are taken to comprise "Socratic philosophy" and which dominate modern philosophical interest in Socrates.

The majority of those with an interest in the "Socratic philosophy" in Plato's dialogues seem inclined to regard it as a relatively accurate representation of the philosophy of the historical Socrates. Various arguments have been used to defend this assumption. Sometimes the evidence of other sources (mainly Aristotle but sometimes Xenophon too) is adduced to demonstrate that the views Plato attributes to Socrates are confirmed as Socratic elsewhere (see Vlastos 1991: 81–106). One influential claim is that Plato alone presents a Socrates who is philosophically exciting enough both to have inspired minds as great as Plato himself and to have provoked the hostility that led to his death (Vlastos 1971: 3; Nussbaum 1985: 231 n.1). In comparison, it is suggested, Xenophon's Socrates looks far too conventional and dull to have provoked such strong feelings (see below). The suggestion here is that Plato's Socrates alone is historically and philosophically plausible.

Those arguing for the accuracy of the dialogues' representation of Socrates are justifiably encouraged by the obviously apologetic motive of much of Plato's writing. It is clear that the dialogues are partly concerned to offer a posthumous defense of Socrates against the misunderstanding that led to his indictment and death. Those defending Plato's historicity suggest that such a defense would surely have to be founded in fact; it would be no use defending Socrates as being something that he was not. So, in trying to correct a misconception, Plato is presumably offering us a relatively accurate version of Socrates. Such a desire to challenge the general misconception is stated most clearly in Plato's *Apology*. There, as mentioned above, Socrates singles out Aristophanes as having misrepresented him as having sophistic leanings and an interest in natural philosophy. He goes on to make a clear statement of the nature of his philosophical intentions and the motivation behind his controversial behavior. Many have been inclined to read the *Apology*'s account as having perhaps the strongest claim to historicity of all the dialogues (see Brickhouse and Smith 1989: 2–10). There are very few, if any, who

would argue that the *Apology* is a verbatim account of Socrates' defense speech in 399. Nevertheless, many scholars have suggested that it is intended to be read as a *plausible* version of what was said, one that would be regarded as generally faithful by those who had actually been present at or had heard first-hand accounts of Socrates' trial. The issue of *Apology*'s accuracy is significant precisely because it is one of the sources used by those attempting to access the historical Socrates. If it is a plausibly accurate version of Socrates' actual defense speech, this would seem to grant us access to a truthful representation of Socrates' own reflections on his philosophical method, interests and motivations. It would also suggest that *Apology* can be used as a check for details of Socratic philosophy identified elsewhere in the corpus.

Plato's *Apology* presents us with two fascinating but puzzling claims about Socrates. The first is that Socrates' *elenctic* inquiries, the source of such irritation for those subjected to them, were motivated by the Delphic oracle's pronouncement that there was no man wiser than Socrates (20e–21a). The second is that Socrates took guidance from an inner voice, or *daimonion* (*Ap.* 31d). Some scholars, encouraged by the perceived historicity of *Apology*, are inclined to take these two claims to be a true account of the historical Socrates and in this they find further encouragement from the corroborating evidence of Xenophon (although the extent to which Xenophon does agree with Plato is questionable, see below). It is notable, however, that Aristophanes make no mention of either. We might think that the claim to be guided by a divine voice and to have one's wisdom exalted by the Delphic oracle would offer a natural source of parody.

It is important to remember that Plato was not the only author of Socratic dialogues (*sōkratikoi logoi*). Although we possess only fragments of other Socratic writings, we know that figures such Antisthenes, Aeschines, Phaedo, and Aristippus also produced works featuring Socrates (although we possess substantial remains only from two works by Aeschines) and it is significant that, as far as we can tell, each version of Socrates seems to have been rather different (see Clay 1994; Kahn 1996: 1–35; Döring 2011). Plato is writing within a genre of Socratic literature (Aristotle refers to a recognized genre of Socratic writings at *Poetics* 1 1447a8–b13) and this fact may provide a further argument in favor of the historicity of his dialogues. For, in addition to trying to correct the popular misconception of Socrates apparently promoted by *Clouds*, Plato was evidently producing his dialogues in competition with these other Socratic authors. So perhaps we can think of him as competing with these others to give an accurate representation of Socrates in contrast to what he believed to be the misrepresentations presented by the other Socratics. In competing to give the preeminent version of Socrates, Plato may well have been competing to give the most accurate representation. Indeed, unless each of these authors was claiming to give an accurate version of Socrates, it is unclear why they wrote about Socrates at all and why there seems to have been some rivalry and disagreement between them.

There are, however, reasons to doubt, or at least to reconsider, the historicity of Plato's account. The first takes us back to the claim that, as the most philosophically sophisticated Socrates, Plato's is necessarily the most plausible. Plato's Socrates, it is suggested, best explains both his influence on brilliant minds like Plato and the degree of hostility he managed to provoke in Athens. But it seems equally plausible that Plato himself could have been the source of this philosophical sophistication (as he is thought by many to be in the middle and late dialogues). So Plato's version of Socrates the man could be genuine, whilst Socrates the philosopher may well always have been Plato's own invention. On the matter of the hostility provoked by Socrates, Plato himself

indicates that this was based on misconception and misunderstanding. We have seen, for example, that Aristophanes' attack on Socrates presents him as the figurehead of a new intellectual elite incorporating Sophists and natural philosophers. Presumably such popular misconceptions need to have been based on no more than seeing the circles in which Socrates mixed and a general awareness that he tended to confuse and humiliate his interlocutors. To assume that the Athenians could have been provoked only by genuine philosophical sophistication and unconventionality is to give them rather more credit than Plato himself indicates they are due.

A further reason for reconsidering the historicity of the Socratic dialogues is the issue of whether they were written with such a biographical intent. Certainly, there seems little reason to suppose that Plato or any of the other Socratic authors wrote with the primary intention of establishing the facts of Socrates' life. Now, we may think it more likely that they shared the intention of establishing the facts of Socrates' philosophy but, in that case, we have to ask how it came to happen that each Socratic author seems to have produced a version of this so different from that offered by his rivals. Perhaps the most satisfactory answer is that each was offering what he took to be the correct *interpretation* or *explanation* of Socrates' philosophical activities and that such endeavors were all the more significant in the light of the fact that Socrates himself wrote nothing. If so, we may be inclined to think that Plato's interpretation is more likely to be true, but we can never go beyond likelihood in this, if only because we are lacking in comparative data, as we have only fragments of the works of other Socratics (apart from Xenophon, discussed below). A point to bear in mind when considering the status of Plato's account is that Aristotle seems to class such *sōkratikoi logoi* as a genre of fiction (on *sōkratikoi logoi* as fiction see Dorion 2011; Kahn 1996: 29–35). If the Socratics perceived themselves to be writing fiction rather than biography, or even doxography, we may want to be rather more careful in seeking the truth within their texts.

At this point, however, it is worth adding one further observation, which may well speak in favor of reading the early dialogues as aiming at the truth, albeit indirectly. There is good reason to think that these dialogues were not intended to be read as verbatim conversations of Socrates. Rather we might think of them as aiming to capture accurately the *kind* of conversations that Socrates had, without claiming that Socrates ever had precisely this conversation with, say, Euthyphro or Laches. The notion of this as a genre of fiction allows for these dialogues to be invented conversations, but with a philosophically accurate core. Now, in some dialogues, Plato actually confronts his reader with the question of the historicity of the conversation they are about to read. So, for example, both the *Theaetetus* and the *Symposium* begin with discussions of the accuracy of the Socratic conversation about to be related. It is notable however, that such explicit concerns with the truth-status of accounts of Socrates only begin to appear in those dialogues that tend to be regarded as more Platonic. If Plato is seeking to highlight the status of these later dialogues as fiction, we can take this in one of two ways. We may want to read this as Plato making explicit a concern with the truth-status of all Socratic conversations. Or, we may think that it is only when Plato starts to put his own views into the mouth of Socrates that he starts to signal the possibility that Socrates never said the kinds of things that he is made to say in these later dialogues.

Whether or not they offer an accurate portrayal of the historical Socrates, Plato's early dialogues offer us enough material to construct a fascinatingly controversial body of "Socratic philosophy." In fact, even if scholars could agree on the matter of its historicity, this might not be enough to allow us to say that we understand the nature

of Socratic philosophy, since almost every element of the methodology and doctrines presented in those early dialogues has been the object of interpretative disagreements (see Ahbel-Rappe and Kamtekar 2006 and Morrison 2011 for evidence of the continuing debates over all aspects of Socrates and Socratic philosophy). Beyond the fact that Plato's Socrates is (at least) a moral philosopher who employs *elenchus*, it is difficult to find general agreement. Issues of controversy include the correct interpretation of his denial of teaching and of knowledge, whether Socrates' *elenctic* motivations are primarily positive or negative, the correct interpretation of the Socratic paradoxes and the degree to which Socrates himself is committed to the views he does put forward in the course of his *elenctic* conversations.

Such interpretative battles are perhaps not unlike those that seem to have been fought in the immediate aftermath of Socrates' death. Yet there is one fact of which we can be certain: Plato perceived Socrates to have enormous philosophical significance. This significance may well have been located specifically in the views he promoted on morality, which may or may not have been those views attributed to him by Plato. It is certainly demonstrated by the dominance of his methodology of *elenchus* within the Platonic corpus, felt not least in the fact that Plato writes dialogues. Without question it is demonstrated by the prominence of Socrates within Plato's writings, even in those later dialogues where we tend to think that Plato has gone a long way beyond the Socratic project. The recurrence of Socrates even when he is no longer the dominant voice of a dialogue enables Plato to indicate the continuity of his thought and that of his teacher. Indeed, one of the reasons that scholars are so interested in discovering what is Socratic in the dialogues is for the way it affects our understanding of Plato's philosophy.

Plato presents Socrates as a paradigmatic philosopher for the sake of his commitment to philosophy. He constructs a Socrates who is prepared to live and to die for philosophy alone. No concerns about convention or comfort or even death can discourage him. He is both infuriating and seductive and, as such, he is the personification of philosophy.

Xenophon's Socratic works

Four of Xenophon's works feature Socrates. Like Plato, Xenophon wrote an *Apology of Socrates* and a *Symposium* and it has been suggested that Xenophon's Socratic writings draw heavily on Plato (see Kahn 1996: 393–401). In Xenophon's *Oeconomicus*, Socrates issues advice on the running of an estate and household to his companion Ischomachus. Perhaps the most interesting of Xenophon's Socratic works are his *Memorabilia*, presented as a collection of reminiscences of Socrates' conversations These are thought to have been composed relatively late compared with the works of the other companions of Socrates, possibly around 360 BC.

Xenophon's Socratic writings have been subjected to a fair amount of criticism over the last century or so (see Dorion 2011 for a summary). Those who champion Plato's account often do so by drawing a favorable contrast with the works of Xenophon. Where Plato's Socrates is philosophically sophisticated and innovative, Xenophon's looks rather less exciting: indeed, he can look quite conservative. Where Plato's Socrates is challenging and frustrating, Xenophon's is didactic and, on occasion, rather banal. At times, it is hard to resist the feeling that Xenophon is using Socrates as a mouthpiece for his own views. In the *Oeconomicus*, for example, Socrates' advice on how to run a household and farm looks very much like the kind of thing we might expect the landowner Xenophon himself to say, as opposed to anything we have any reason to think that Socrates would

ever have been interested in (especially if Plato's characterization of Socrates as a firm urbanite is to be believed). Faced with such differences, it is hardly surprising that readers have come to prefer Plato's version. As with Plato, however, we can see that the credence and interest given to Xenophon's Socrates depends very much on the interests and motivations of those judging the value of his writings. In general, those who prefer Plato's text, as both more plausible and more philosophically interesting, tend to accept Xenophon only where he seems to be corroborating Plato's version. Where the two authors disagree, Plato's version is generally accepted as more likely to be true.

One motivation for comparing and contrasting Plato and Xenophon (and for judging Plato to be superior) is that, on several points, the two authors disagree. So, for example, in Plato's *Apology* Socrates suggests, on being found guilty, that he should be "punished" by being given free meals by the state (36d). In contrast, Xenophon's *Apology* has Socrates refusing to name a penalty at all (Xen. *Ap.*23). Since we would tend to think that, in such straightforward disagreements, there really is a fact of the matter, we find ourselves forced to choose between these two accounts. In the absence of any external evidence, our choice will inevitably depend on our overall attitude towards the worth of each version.

There are other, possibly more significant, disagreements between Plato and Xenophon. One of the most notable is their differing accounts of Socrates' *daimonion* (another is the issue of Socrates' disavowal of knowledge, on which see below). According to Plato, this divine inner voice spoke only to prevent Socrates from acting in a certain way, never to issue positive decrees (31c–d). On Xenophon's account, the *daimonion* issued both positive and prohibitive edicts (*Mem.* 1.1.4). This is a significant difference and, again, which account we choose to prefer will depend on a variety of factors. Above, I noted the common opinion that Plato's *Apology* has the best claim to historicity of all his dialogues and that it was written with the explicit intention of giving an account that would be accepted as a plausible record by those who were familiar with what had actually taken place. A significant factor in accepting the general truth of Plato's version of Socrates' defense speech is that, as we are told, Plato himself was present in court (*Ap.* 34a). Xenophon, by contrast, is thought to have been abroad on campaign at the time of Socrates' trial.

At this point, it is worth considering what Xenophon says about his account of Socrates' defense speech, for whilst Plato's *Apology* is presented without any comment or contextual frame, Xenophon is explicit about his purpose in writing his *Apology*. He says that he is giving a new account because no one else has successfully managed to explain Socrates' haughtiness during the trial (*Ap.*1). This is noteworthy because it looks like an explicit admission that Xenophon is in competition with others (probably including Plato) who have given different versions of the trial. It is also significant because it is an acknowledgement that what Xenophon is describing is not what Socrates said, but rather the motivations for and explanation of what he said. Xenophon acknowledges that what he is offering is an interpretation and, if he is aiming, as he claims, at explanation rather than reportage, it seems inappropriate to judge his account in terms of its historical accuracy. Of course, we are left with the question of the historical plausibility of the motivation that Xenophon ascribes to Socrates. Many have found fault with Xenophon's claim that Socrates had come to find death more desirable than a life of increasing decrepitude (see, for example, Brickhouse and Smith 1999: 40). Of course, in doing so, they judge it against what they know of Socrates from other sources, in particular from Plato.

Xenophon's approach to his Socratic writings is thus notably different from that of Plato. So for example, Xenophon includes relatively frequent claims that he is recounting conversations that he himself overheard. For some time, such claims were taken seriously and Xenophon's account was believed to be an attempt at accurate biography. Nowadays it is generally accepted that no author in this period (not even a historian like Xenophon) was genuinely concerned with factual accuracy in this sense (as opposed to plausibility). Indeed, Xenophon's dubious claims to have heard the conversations he describes are taken by some as evidence only of his general unreliability (see Cooper 1999 for a summary of attitudes towards the historicity of Xenophon's Socratic writings). The second difference is that Xenophon, by speaking in his own voice in the frames of his Socratic writings, is able to render explicit his motivation in writing what and how he does. Plato never speaks in his own voice in his dialogues and thus leaves us to consider and construct our own understanding of his motivations and intentions in writing about Socrates. Xenophon, however, makes his intentions clear. He writes about Socrates, he says, in order to show that he was beneficial to those with whom he engaged in conversation (see, for example, *Mem.* 1.2.1–3), that is, to counter one of the charges that led to Socrates' death, that of corrupting the youth of Athens. (Xenophon is also, as *Mem.* 1.1 makes clear, intent on demonstrating the falsehood of the further charge of impiety.)

The fact that Xenophon is explicit about his motivation and intention in writing about Socrates allows us to judge his account on its own terms. It also allows us to consider the extent to which differences from Plato's account may be connected to such concerns. As already noted, the most common criticism of Xenophon's Socrates is that he is implausibly philosophically dull. There are two ways to challenge this criticism. The first is to suggest that Xenophon is not aiming to describe the same kind of conversations that Plato seeks to represent (Cooper 1999: 22). It may be that Socrates spoke to different people in different ways. With those who claimed expertise in moral questions, he may have been keen to indulge in a spot of the rigorous, refutative *elenchus* we find in Plato's Socratic dialogues. With those more concerned with being granted some basic guidance on what to do in a particular situation, he may have been willing to offer relatively straightforward advice, such as we find in Xenophon's *Memorabilia*. The second way to counter the charge is to suggest that, in setting out to defend Socrates' positive influence on the young men with whom he conversed, Xenophon is simply less interested in the doctrinal nitty-gritty of Socratic definitions and paradoxes. This may make his Socrates less philosophically interesting but it does not necessarily make him less historically plausible. Indeed, some might think that Xenophon's lack of philosophical interest and innovation are points in favor of his accuracy. It is plausible that Xenophon was too philosophically dull to invent controversial philosophical doctrines for his Socrates, in a way that Plato clearly was not. John Cooper inverts the standard line to ask whether it seems plausible that someone as controversial and frustrating as Plato's Socrates could have attracted the attentions of a man as conventional as Xenophon (Cooper 1999: 14).

Attempts to rehabilitate Xenophon's Socratic writings do not stop at asking us to accept that he may have good reason to present an unphilosophical Socrates. More recently, scholars have argued that it is possible to find significant and interesting philosophy within the *Memorabilia* (see Natali 2006; Seel 2006; Cooper 1999; O'Connor 1994). In particular, they have focused on Xenophon's representation of Socrates' commitment to the significance of *enkrateia* (self-control) for virtue. This is particularly important because it seems to stand at odds with Plato's insistence on Socrates' claim

that virtue is knowledge. If Plato is right and Socrates held that knowledge was sufficient for virtue, this seems to leave no room for *enkrateia* to play a role in Socratic virtue, for the virtuous man will have no urges to act against his better judgment which would require self-control. Once more we find a difference between Plato and Xenophon and once more we must decide how to approach it. Some have simply dismissed Xenophon's emphasis on *enkrateia* as an attempt to use Socrates as a mouthpiece for his own, relatively conventional brand of moral philosophy. Others have suggested that Xenophon is indeed representing a genuine aspect of Socratic philosophy. Again, it is possible, and perhaps even plausible, that the historical Socrates presented the difficult, nuanced and controversial extreme of the denial of *akrasia* in his more technical philosophical discussions but that, for those who were just setting out in their education or looking for basic guidance, it was appropriate to present them with a less controversial doctrine of self-control (at least as a way of setting them in the right direction). Rather than misunderstanding Socrates altogether, it may be that Xenophon is aiming to represent his exoteric, rather than his esoteric, philosophy.

One final note on the plausibility of Xenophon's Socrates is worth making. We have seen how far apart the Socrates of Aristophanes stands from that of Plato. The former, as a conflation of Sophist and natural philosopher, seems to be everything that Plato's Socrates denies himself to be (not least in the *Apology* where the denial is explicitly targeted at *Clouds*). I noted above that Xenophon's Socrates shares Plato's Socrates' disinterest in natural philosophy. However, it may just be possible that Xenophon's Socrates fits rather better with the caricature of *Clouds* than has generally been recognized. One of the natural philosophers whose thinking has been identified within the muddled doctrines lampooned by *Clouds* is Diogenes of Apollonia. Now, scholars looking at the *Memorabilia* have also found similarities between the teleological cosmology that Socrates proposes and the teaching of Diogenes (Jaeger 1947: 189–95; Vander Waerdt 1994: 74–5). So Xenophon's Socrates seems to offer some justification at least for the conflation at the heart of Aristophanes' version. This becomes even clearer when we consider that the didacticism of Xenophon's Socrates presents a better (if not complete) fit with Aristophanes' characterization of him as a Sophist, unashamed to express his own views and to claim to teach virtue. In this respect, then, we might think that the plausibility of Xenophon's Socrates is increased insofar as it presents a version more likely to have provoked Aristophanes' caricature than Plato's obviously anti-sophistic, anti-didactic moral philosopher.

Aristotle

For some, Aristotle's account of Socrates' philosophy is the most trustworthy of our ancient sources. This is because he lacks both the apparent hostility of Aristophanes and the apologetic motivations of Plato and Xenophon. In addition, he has both the sophistication of intellect to understand the philosophical elements of Socrates' thought and direct access to first-hand accounts of Socrates. Although Aristotle himself was born fifteen years after Socrates' death, he would no doubt have heard about Socrates from those who actually knew him, not least his own teacher, Plato. Whereas Aristophanes, Xenophon and even Plato seem to offer *interpretations* of Socrates, Aristotle is often taken to be giving an objective account of Socratic thought.

Aristotle mentions Socrates' philosophy at various points in his writings and the picture he presents is relatively general and limited in detail (he tells us nothing, for

example, about Socrates' *daimonion*). It is possible to identify three substantial claims from what Aristotle has to say. First, Socrates had an interest in ethics, but not natural philosophy (*Metaph.* A.6, 987b1). Second, he was interested in particular in definitions of moral terms (*Metaph.* M.4, 1078b9–17). Third, he did not separate these universal definitions by making them metaphysical entities (*Metaph.* M.4, 1078b30–2). This last point is made in the context of distinguishing Plato and Socrates: whilst Plato presented universals as separate (that is, as Forms), Socrates looked for universal definitions without making the (erroneous, in Aristotle's opinion) move to separate them from perceptible reality. Aristotle's ethical works also seem to provide evidence for the authenticity of the Socratic Paradoxes (*Eth. Eud.* 1.5, 7.2, 1216b2–9; *Eth. Nic.*1145b23–7).

For an example of how Aristotle's evidence has been employed, we can turn again to the work of Gregory Vlastos (1991: 81–106). Vlastos argues that Aristotle's testimony supports his hypothesis that the philosophy presented in Plato's early dialogues is that of the historical Socrates. In particular, he takes it to support his claim that Socrates had no metaphysics and that the development of the theory of Forms in later dialogues is a Platonic innovation. So, he says, Aristotle's references to Socrates "tally completely with the portrait of Socrates in Plato's early dialogues" (Vlastos 1971: 1 n.1).

At this point, however, we must consider two significant aspects of Aristotle's account. The first is that it is, to all extents and purposes, second-hand. Aristotle is telling us what other people have told him Socrates thought. One of these people is, of course, quite likely to be his teacher Plato. So it seems perfectly possible that he is offering an objective account of Plato's version of Socrates, based in large part on Plato's dialogues. Now, some have suggested that this need not undermine Aristotle's credibility, because it is perfectly possible, indeed plausible, that Aristotle would have checked Plato's version against that of other Socratics and formed his own judgment (Lacey 1971: 45). This brings us to our second issue, however, which is that, even if Aristotle was scrupulous in checking the accuracy of the accounts of Socrates he was reading and hearing, there is no reason to think that he is himself aiming at scrupulous objectivity in his description of Socrates. When we look, in particular, at what he has to say about the difference between Socrates and Plato in separating universals, it is worth bearing in mind not only that Aristotle is interested in distinguishing Plato and Socrates, but that he does so with the explicit intention of criticizing Plato's decision to introduce separate universals. This is to say that Aristotle's comments on Socrates here are not utterly unbiased; rather, they are motivated by his desire both to criticize Plato and to demonstrate that Socrates' position is much closer to his own. This need not imply that Aristotle is misleading us in his account of Socrates, but only that, as with each of the version of Socrates that we have seen so far, Aristotle's account is motivated by his own agenda and (philosophical) concerns (see Kahn 1996: 79–87).

Conclusion

The above summaries should go some way to indicating the extent and significance of the contradictions and similarities between the sources. There are a variety of approaches one can take when trying to find the real Socrates behind them (see Kahn 1996: 71–100). One methodology that has been widely preferred is to assume (or to argue for) the precedence of one source. As we have seen, this is usually Plato, since his Socrates is the most interesting and richest in terms of philosophy and characterization. If we agree that Plato's Socrates is the most likely to be true, we need worry only

where there seems to be a contradiction within the dialogues themselves (as has been perceived by some between the early and middle dialogues). Where there is such a contradiction, we can look to the evidence of the other texts to see whether they offer corroborative evidence that will allow us to classify some particular position as Socratic (this is a rather crude summary of the methodology of Vlastos 1991: 45–106). One of the disadvantages of this approach is that it generally ignores any evidence that contradicts Plato completely (as we have seen that Xenophon often does) and pretty much ignores Aristophanes altogether.

At the other extreme, we might feel that it is simply impossible to judge these texts against one another and that, in fact, it is misguided to seek historical truth in fictions such as those of Plato and Xenophon or the "creative" doxography of Aristotle. We may be happy to say that each text offers no more than an *interpretation* of Socrates and that each can and should be judged on its own terms against its own agenda, while attempts to find the real Socrates should be quietly set aside (for a far more subtle suggestion, see Dorion 2011).

For those who find the allure of the historical Socrates too much to resist, a third way of approaching these texts might be to looks for points of agreement between two or more, assuming that such agreement indicates some truth about Socrates. We have seen, for example, that both Xenophon and Plato agree on the matter of Socrates having a *daimonion*, if not on the detail of whether its instruction was positive or negative. Plato, Aristotle and Xenophon all agree that he was primarily interested in ethical questions. Aristophanes, Plato, and Xenophon each indicate that he moved in sophistic circles. This approach has its difficulties however, for it must face up to the possibility that one source agrees (or even disagrees) with another precisely because it is written in the shadow of that other text.

It is perhaps worth considering a particular issue at the heart of the Socratic identity. In many of his dialogues, Plato has Socrates deny that he possesses knowledge (the nature and extent of this disavowal of knowledge is much debated, but it is definitely there). Aristotle seems to corroborate this claim (*Soph. el.* 34, 183b7–8). Xenophon's account is rather more complicated, insofar as the only reference he makes to Socrates' ignorance is presented as criticism by another (*Mem.* 4.4.9–10). Otherwise, there is little about Xenophon's didactic Socrates to suggest that he is vexed by an awareness of his own lack of knowledge. As for Aristophanes, although one might search the play for oblique references to Socratic ignorance, there is nothing explicit. How should we react to this pool of information? Well, perhaps it is possible to view these sources as offering evidence of a *tradition* of Socratic ignorance. Some may prefer to conceive of that tradition as having historical accuracy at its heart, others may be happy to deal with the tradition as no more than that. Without doubt, these texts provide an endless source of philosophical, literary and historical stimulation. More than anything, they are a testimony to the power of the Socratic persona as a stimulus for argument and originality.

References and further reading

The best place to start is with the sources themselves, each of which is available in a variety of agreeable translations. A useful collection of extracts from the source material is provided by T. Brickhouse and N. Smith's *The Trial and Execution of Socrates: Sources and Controversies* (2002). G. Vlastos' *Socrates: Ironist and Moral Philosopher* (1991) provides an enormously influential argument for the location of what is Socratic within Plato's dialogues. S. Ahbel-Rappe and R. Kamtekar's *A Companion to Socrates* (2006) and D.

Morrison's *The Cambridge Companion to Socrates* (2011) are two useful and comprehensive collections on various Socratic issues.

Ahbel-Rappe, S. and Kamtekar, R. (2006) *A Companion to Socrates*, Oxford: Blackwell.
Brickhouse, T. and Smith, N. (1989) *Socrates on Trial*, Oxford: Oxford University Press.
Brickhouse, T. and Smith, N. (1999) *The Philosophy of Socrates*, Boulder, CO: Westview Press.
Brickhouse, T. and Smith, N. (2002) *The Trial and Execution of Socrates: Sources and Controversies*, Oxford: Oxford University Press.
Clay, D. (1994) "The Origins of the Socratic Dialogue," in P. Vander Waerdt (ed.) *The Socratic Movement*, Ithaca, NY: Cornell University Press: 23–47.
Cooper, J. (1999) *Reason and Emotion*, Princeton, NJ: Princeton University Press.
Döring, K. (2011) "The Students of Socrates," in D. Morrison (ed.) *The Cambridge Companion to Socrates*, Cambridge: Cambridge University Press: 24–47.
Dorion, L. (2011) "The Rise and Fall of the Socratic Problem," in D. Morisson (ed.) *The Cambridge Companion to Socrates*, Cambridge: Cambridge University Press: 1–23.
Dover, K. (1971) "Socrates in the *Clouds*," in G. Vlastos (ed.) *The Philosophy of Socrates*, Garden City, NY: Anchor Books: 50–77.
Edmunds, L. (1985) "Aristophanes' Socrates," *The Boston Area Colloquium in Ancient Philosophy* 1: 209–230.
Jaeger, W. (1947) *The Theology of the Early Greek Philosophers*, Oxford: Oxford University Press.
Judson, L. and Karasmanis, V. (eds.) (2006) *Remembering Socrates*, Oxford: Oxford University Press.
Kahn, C. (1996) *Plato and the Socratic Dialogue*, Cambridge: Cambridge University Press.
Konstan, D. (2011) "Socrates in Aristophanes' *Clouds*," in D. Morrison (ed.) *The Cambridge Companion to Socrates*, Cambridge: Cambridge University Press: 75–90.
Lacey, R. (1971) "Our Knowledge of Socrates," in G. Vlastos (ed.) *The Philosophy of Socrates*, Garden City, NY: Anchor Books: 22–49.
Morrison, D. (ed.) (2011) *The Cambridge Companion to Socrates*, Cambridge: Cambridge University Press.
Natali, C. (2006) "Socrates' Dialectic in Xenophon's *Memorabilia*," in L. Judson and V. Karasmanis (eds.) *Remembering Socrates*, Oxford: Oxford University Press: 3–19.
Nehamas, A. (1999a) "Voices of Silence: On Gregory Vlastos' Socrates," in A. Nehamas *Virtues of Authenticity*, Princeton, NJ: Princeton University Press: 83–107.
Nehamas, A. (1999b) *Virtues of Authenticity*, Princeton, NJ: Princeton University press.
Nussbaum, M. (1980) "Aristophanes and Socrates on Learning Practical Wisdom," *Yale Classical Studies* 26: 43–97
Nussbaum, M. (1985) "Commentary on Edmunds," *The Boston Area Colloquium in Ancient Philosophy* 1: 231–40.
O'Connor, D. K. (1994) "The Erotic Self-Sufficiency of Socrates: A Reading of Xenophon's *Memorabilia*," in P. A. Vander Waerdt (ed.) *The Socratic Movement*, Ithaca, NY: Cornell University Press: 151–80.
O'Connor, D. K. (2011) "Xenophon and the Enviable Life of Socrates," in D. Morrison (ed.) *The Cambridge Companion to Socrates*, Cambridge: Cambridge University Press: 48–74.
Rowe, C. (2007) *Plato and the Art of Philosophical Writing*, Cambridge: Cambridge University Press.
Seel, G. (2006) "If You Know What Is Best, You Do It: Socratic Intellectualism in Socrates and Plato," in L. Judson and V. Karasmanis (eds.) *Remembering Socrates*, Oxford: Oxford University Press: 20–49.
Vander Waerdt, P. (1994) "Socrates in the *Clouds*," in P. Vander Waerdt (ed.) *The Socratic Movement*, Ithaca, NY: Cornell University Press: 48–86.
Vander Waerdt, P. (ed.) (1994b) *The Socratic Movement*, Ithaca, NY: Cornell University Press.
Vlastos, G. (1971) "The Paradox of Socrates," in G. Vlastos (ed.) *The Philosophy of Socrates*, Garden City, NY: Anchor Books: 1–21.
Vlastos, G. (1991) *Socrates: Ironist and Moral Philosopher*, Cambridge: Cambridge University Press.

Related chapters

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9. Reading Plato

Part II

PLATO

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9
READING PLATO

Alex Long

Plato is one of the great philosophical writers, but his dialogues present special problems of interpretation. Given that in the dialogues Plato does not speak to his readers directly, we may wonder whether, or to what extent, he is endorsing and claiming ownership of the theories and arguments that the dialogues contain. In the dialogues proper, Plato never appears as a character; in the *Apology* (not formally a dialogue, although in 24c–28a it contains dialogue between Socrates and his accuser) Plato is present (34a) and, Socrates reports, Plato is one of the friends who persuade Socrates to propose a larger fine as his penalty (38b). The dialogues have a range of protagonists (Socrates, Timaeus, Critias, Parmenides and anonymous visitors from Elea and Athens), but most commonly the conversation is led by Socrates, and it is on the relationship between Plato and Socrates' arguments that I shall focus.

This chapter is not a history of Platonic interpretation in antiquity or in modern scholarship, but readers of this *Companion* should be aware that contemporary discussions have been enlivened by a renewed interest in ancient interpretations of Plato (see particularly Annas 1999, Sedley 2000, Tarrant 2000, Vogt 2012 and the irreverent use of Proclus in Burnyeat 1997). Readings of Plato in antiquity may contain attractive alternatives to contemporary interpretations; at the very least, they may help us avoid the habits of mind into which scholarship easily falls.

The discussion of writing in the *Phaedrus*

Near the end of Plato's *Phaedrus* (274b–278e) Socrates discusses writing and compares it with conversation. Plato's interpreters have often looked to this passage for guidance. It is sometimes suggested that Socrates' remarks in the *Phaedrus* constitute a "rejection" or "dismissal" of writing. If Socrates is here speaking for Plato, this "dismissal" is surprising or paradoxical, given that Plato wrote extensively and the *Phaedrus* was not his final piece of writing. (According to a credible ancient tradition, recorded in Diogenes Laertius 3.37, the *Laws* was not completely finished and revised when Plato died, and it is now widely agreed that the *Philebus*, *Sophist*, *Statesman*, *Timaeus* and *Critias* were also written after the *Phaedrus* and at a late stage of Plato's career.) Plato must have had at least a sufficiently high opinion of writing to entrust to writing his "rejection" of it and then to go on writing. In fact, however, Socrates does not simply dismiss or reject writing.

At this point in the dialogue Phaedrus has mentioned an Athenian antipathy to so-called "speech-writers," such as Lysias, and this has prompted Socrates to consider whether the antipathy is real and rational. The distinguishing mark of a "speech-writer"

was composing oratory for others to use in court, and one reason why speech-writers were disliked was that their rhetorical skills, their fees and the fact that their speeches were crafted at the desk rather than spontaneously made them look a lot like Sophists to the popular eye. Plato's contemporary Alcidamas wrote a treatise with the two titles *On Sophists* and *On those who write written speeches*, and in Demosthenes (19.246) we find "speech-writer" and "sophist" mentioned together as terms of abuse. Plato must have been aware that rhetorical writers were the objects of particular suspicion, but he makes Socrates ignore the association of speech-writing with sophistry and instead consider in the most general terms what could be said against writing.

Socrates' verdict on writers, speech-writers included, is that they deserve opprobrium only if they are unaware of the limitations of writing (277d). The message to Athenians is that they should not use "speech-writer" as a slur against someone until they have found out how he regards his writing; the message to Lysias and other writers is not that they should stop writing, but that their attitude to their writing needs to change. Socrates points out that a piece of writing cannot select its readership, cannot defend itself from unfair criticism and, when asked a question, has only a single answer, namely whatever the author chose to write (275d–e); he then contrasts writing with conversation, where it is possible to choose an interlocutor and to meet criticism with a suitable answer (276a). When spelling out the implications for writers, Socrates says the following: (1) a writer should not aim to transmit "expertise" (275c); (2) a writer should not aim "to teach the truth properly" (276c); (3) a writer should write for "play" or "recreation" (276b–d); (4) a writer should compose "notes" or "reminders" for himself and for others who "follow the same path" (276d). (1) and (2) may be two versions of one prohibition, for it is possible that teaching a truth "properly" amounts to giving the pupil expert knowledge of that truth. A focus on the teaching of *expertise* is quite natural in the context of the *Phaedrus*, given that much of the *Phaedrus* is devoted to considering what would be necessary to make rhetoric a genuine expertise.

If Socrates' discussion of writing accurately conveys Plato's view of writing, Plato must believe that he cannot turn his readers into experts by means of his dialogues and, more specifically, that the *Phaedrus* does not impart the rhetorical expertise whose prerequisites it discusses. (This is a plausible interpretation of the *Phaedrus* independently of the discussion of writing, for Socrates carefully avoids a didactic stance and, instead of turning Phaedrus into an expert orator, merely outlines what an expert orator would need to have achieved.) But Plato can believe what Socrates says about writing without believing that his writings do not communicate what he, Plato, regards as the truth; it is possible to present one's own views without offering expertise.

Socrates also suggests that writing should be composed for play or recreation. It is hard to know what exactly that means, but we can at least use the *Phaedrus* to see how much is *excluded* by the insistence on play. For Socrates represents himself as having "played" in the *Phaedrus* (278b; see also 265c–d), and we can compare this comment with what he has actually done. By the time we get to 278b Socrates has put forward, and defended with arguments, many positive claims about rhetoric and writing, and has just set out the attitude and understanding that he and Phaedrus should wish to attain (278b). His discussion of rhetoric and his giving Phaedrus and himself a model for emulation look like serious undertakings, and so we might wonder why he represents himself as having "played"—perhaps it is a way of countering any impression he may have given of speaking as a teacher. In any case, Socrates' conception of "playing" must be sufficiently generous to include intellectual reform and the statement of positive theories

and arguments. Speaking "for recreation" evidently encompasses more than we might have supposed, and presumably writing "for recreation" has a similarly large range. So when Socrates describes good writing as undertaken for "recreation" or "play," Plato is not narrowing down the options for his writing as strictly as we would have thought if we had isolated the passage from its context in the *Phaedrus*.

Socrates also suggests that writing should be addressed either to the author himself or to those on the same "path" as the author ((4) above). But it is still possible that Plato wrote with the intention of reforming others. Plato may regard very diverse people—from collaborators in the Academy to those taking their first steps in philosophy—as treading the path that he has chosen for himself. Some parts of his writing may be meant to impress upon the most junior and tentative philosophers that they are making the right choice, but other parts of his writing may reflect advanced discussion in the Academy; this tallies with the fact that some of Plato's dialogues, and some parts of some dialogues, are far more demanding than other dialogues and other dialogue-parts. Those who have chosen the "path" of philosophy may nonetheless hold, or be attracted to, views that Plato seeks to discredit, and so, even if their fundamental orientation is correct, they may still be in need of some correction and reformation.

Socrates' description of good writing is thus compatible with the extraordinary variety and range of Plato's output. What Plato is most clearly denying himself is transmitting expertise to his readers and convincing readers who have set themselves on a different "path." The fact that Socrates claims in the *Phaedrus* to be "playing" and does not cast himself in the role of teacher—two hallmarks of good writing, according to his comments at the end of the dialogue—strongly suggests that in writing his dialogue Plato has aimed to show his awareness of the limitations of writing. It also suggests that, contrary to what is often suggested, Plato does not regard his own way of writing as somehow circumventing those limitations. If Plato had wished to make his own writing an exception to Socrates' strictures on writing, he would have indicated that it can teach and was written in deadly earnest.

Another passage that has been taken to show Plato's intentions as a writer occurs in the seventh of the *Letters* that have come down to us in Plato's name. Scholars do not agree whether its author was Plato himself. According to the author, the Syracusan tyrant Dionysius has been writing about the subjects that he heard Plato discussing, and this prompts the author to separate authentic Platonic philosophy from Dionysius' writing. He says that the subject or subjects with which Plato is "seriously engaged" cannot be verbally expressed and that those who claim to understand the subjects cannot really have this understanding (341b–e, 344c–d). Plato himself, according to this source, did not address the subject(s) in writing. It is not clear from these passages what the author, whoever he was, is trying to tell us about Plato's attitude to the subjects that *are* discussed in the dialogues. His interest lies not in helping his readers understand Plato's writing but in showing that Plato's most serious reflections were not committed to writing. (Elsewhere—343a—he tells us that nobody intelligent would entrust "the objects of intelligence" to discourse and particularly not to writing; here again we badly need to be told what these objects are.) Play and recreation are never mentioned. It looks as if the author of the letter knows the *Phaedrus* but finds the thought that Plato's most serious work concerned lofty unwritten matters more congenial, and more useful for the task of distancing Plato from Dionysius' text, than the thought that Plato wrote for recreation.

Socrates and the dialogue form

Plato's dialogues have sometimes been compared to plays (see for example Scott 2007: xi), and, viewed that way, it seems one-sided to treat a single character, even if he or she is the leading character, as the author's spokesman. After all, the argument might run, we should not take Hippolytus to speak for Euripides in the latter's *Hippolytus*. The comparison with plays contains an important insight, namely that Plato does not speak to his readers *only* by means of Socrates' words. But if we read Plato's dialogues as if they were plays we risk missing the centrality of Socrates in Plato's dialogues and, so far as we can tell, in Plato's conception of the genre to which he was contributing. Unlike most of the plays that we read or see at the theater, Plato's dialogues were, at least in origin, part of a movement memorializing and seeking to understand a single complex figure.

Plato's choice of form was not simply the dialogue but the Socratic dialogue. Other fourth-century authors were already composing prose dialogues in which Socrates appeared as the main speaker. Xenophon's own contributions to Socratic literature have survived (see Bryan, Ch. 8 this volume), and some evidence about works by other Socratic authors (Aeschines, Antisthenes, Aristippus, Eucleides, Phaedo) has also survived. It is now easier for students and scholars to get a sense of the surviving evidence about other Socratic authors, thanks to such surveys as Vander Waerdt 1994, Kahn 1996, Ford 2008, and Boys-Stones and Rowe 2013. The literary background has to be our starting point when we consider Plato's reasons for writing dialogues. Dialogue form was establishing itself as the principal form for those who wished to write (or at least to write sympathetically) about Socrates.

Our impression that for Plato there was a strong connection between dialogue form and Socrates is confirmed when we turn to some of the Platonic dialogues in which Socrates is *not* the main speaker. In Plato's *Timaeus*, *Sophist* and *Statesman* another philosopher (Timaeus or a visitor from Elea) guides the discussion and Socrates is given much less to say than usual. But Socrates is still present, even though he is silent for most of the discussion. This may indicate a constraint, perhaps a self-imposed constraint, under which Plato was writing. Historians had already written dialogues or debates in which Socrates is not involved (the most famous examples being the discussion of constitutions in Herodotus 3.80–3 and the Melian dialogue in Thucydides 5.84–113). Xenophon, a versatile author who experimented with a wide range of prose genres, composed in addition to Socratic dialogues the *Hiero*, a fictional conversation, from which Socrates is of course absent, between the tyrant Hiero and the poet Simonides. But in Plato's eyes writing a philosophical dialogue without including Socrates *at all* may have seemed subversive. Of course, an artist like Plato can turn a constraint into an opportunity, and there are some moments in the *Sophist* and *Statesman* where Socrates' quiet presence reminds the reader of Socrates' personal relevance to the discussion, as for example when in the *Statesman* the visitor imagines a regime in which someone who undertakes forbidden inquiry is called a "sophist" and put on trial as a corrupter of the young (299b–e). One of the charges against Socrates was "corrupting the young," and Plato's reader is undoubtedly meant to recall Socrates' trial and execution. In the *Laws* Plato finally takes the step of writing a dialogue in which Socrates does not appear and so of separating dialogue form from Socrates. But for Plato, inventing the *non-Socratic dialogue* was a slow process.

It is now widely agreed that Plato is not recording the historical Socrates' words and that, as Vlastos put it, "Plato is producing, not reproducing, Socratic philosophizing"

(1991: 50). The Socrates whom we meet in Plato's dialogues is always Plato's reinvention of Socrates (see further Bryan, Ch. 8 this volume). Plato is also not consistent in the range of philosophical interests that he attributes to Socrates. Sometimes Socrates' real interests seem to lie in morality and theology and in the arguments that are needed to make progress in either field. This is the Socrates of the *Euthyphro*. In the *Apology* Socrates betrays some unorthodox theological beliefs but suggests that his only activity is moral exhortation:

> I go around doing nothing but persuading both the young and old among you not to care for your bodies or wealth before, or as urgently as, ensuring that your soul is as good as possible.
>
> (*Apology* 30a–b)

But sometimes, as for example in the *Phaedo* and *Republic*, Socrates acquires further philosophical interests and propounds theories about metaphysics and the immortality of the human soul.

In explaining these contrasting treatments of Socrates, one option is to suggest that Plato's thought and his intentions as a writer changed over time, and that in the *Phaedo* and *Republic* he came to use the dialogue form not, as he had originally done in such works as the *Euthyphro* and *Apology*, in order to explore Socrates' philosophy, but in order to present his own philosophy and its greater range of interests; the classic account of this "developmental" view is Vlastos 1991: chapters 2–3. An alternative, defended in Kahn 1996, is to explain the differences between dialogues in terms of a gradual exposition and to suppose that the shorter and inconclusive dialogues, such as the *Euthyphro*, were never intended to show Socrates' philosophy but rather were intended all along to prefigure the doctrinal system that is presented more fully in the *Phaedo* and *Republic*. This second interpretation is an example of so-called "unitarian" readings, which avoid explaining differences between the dialogues in terms of development over time.

A compromise is possible, if one says that when writing with Socrates as protagonist Plato always takes himself to be exploring Socrates' philosophy but restricts himself with different degrees of severity when finding Socratic answers to philosophical questions. Sometimes Plato wishes to explore how Socrates would address the sort of question that was associated with Socrates by other Socratic authors (and probably by Plato's personal recollections of the historical Socrates), but at other times Plato imagines how Socrates would contribute to further areas of inquiry. For example, Socrates, in his appearances in dialogues not written by Plato, seems to have had little interest in metaphysical theory. What theory would Socrates have propounded if he *had* devoted some time to metaphysics? On turning to the Platonic dialogues where Socrates acquires interests in metaphysics we find Plato's answer, namely that in a Socratic, or "Socratic" (scare quotes now being appropriate) metaphysical theory there would have to exist suitable objects for Socratic inquiry. Socrates tried to define and understand the virtues or forms of goodness, and, if these items are to be known by us, their real nature must be unchanging but accessible to human reason. (The first of the two requirements assumes that an object in flux cannot be known, but according to Aristotle Plato accepted this assumption.) So it starts to look as if the success of a Socratic inquiry depends on the existence of what Plato's Socrates calls a "Form" or "what such-and-such is." That is why Plato feels able to put the theory of Forms into *Socrates'* mouth, even though his contemporaries no doubt regarded this as a strange attribution. Plato's reader is now

encouraged to construe Socrates' attempts in question-and-answer conversation to define the virtues as if these inquiries had been directed towards Forms:

> SOCRATES: Our present argument is no more about the Equal than about the Beautiful itself, the Good itself, the Just, the Pious, and, as I've been saying, about everything to which we attach this label, "what such and such is," both when asking our questions and when giving our answers.
>
> (*Phaedo* 75c–d)

It turns out that there is a surprisingly large range of questions for which a "Socratic" answer can be found, and so the dialogues in which Socrates is the leading speaker also address politics (a central concern of the *Republic*), expert rhetoric (together with love, one of the two central topics of the *Phaedrus*), as well as metaphysics and the soul. Socrates' philosophizing cannot be indefinitely extended, however, and eventually Plato comes to experiment with other protagonists, such as Timaeus. But even there, as we have seen, the connection between Socrates and dialogue form is hard to break.

When considering Plato's representation of Socrates we can draw contrasts not only between dialogues, but also within a single dialogue. Consider for example Plato's *Symposium*, where Plato takes a familiar Socratic topic but then makes Socrates discuss that topic in such a way as to push back the boundaries of Socratic thought. One of the topics connected with Socrates in other Socratic literature was *erōs* or love. In Aeschines' dialogue *Alcibiades* Socrates professes love for Alcibiades but says that he has no learning that he can share with him. But, Socrates adds, he thought that because of his love his company would nonetheless be beneficial:

> I know no piece of learning that I could teach someone and so benefit him, but all the same I thought that, because of my love, by spending time with Alcibiades I would make him better.
>
> (Aeschines *SSR* VI A 53; for a fuller English translation, see Kahn 1996: 21)

In Aeschines' dialogue, Socrates regards his love as a substitute for the knowledge that he lacks. So when Plato makes Socrates say, near the start of his *Symposium*, "I claim to know nothing except the matters of love" (177d), at first blush it may not have seemed surprising. But on reflection Plato's *Symposium* is suggesting a different view of Socrates, for Socrates' self-description there suggests that for him love is not a substitute for knowledge but rather the single item that he knows. And when Socrates gets a chance to expound his views about love, he claims to have been taught a theory about the nature of love and its objects, a theory that includes the claim that the beautiful object to which love should ultimately be directed is the Form of Beauty. We are now encouraged to think that Socrates' preoccupation with love contains a good deal more theorizing than we might otherwise have supposed.

Alcibiades himself then enters and, comparing Socrates to the lustful, ugly deity Silenus, makes a similar point about Socrates' virtue; it too is more extensive than we would have supposed. Socrates' similarity to Silenus is just a cover story:

> Be sure that none of you knows him (Socrates). Now that I have started, I will reveal him. What you *see* is that Socrates is amorously disposed to beautiful

> men, is always in their company and is powerfully affected by them, and also that he is completely ignorant and knows nothing, at least as he appears. Is this not like Silenus? Very much so. This is his external cover, like a carved statue of Silenus. But inside, if opened up, you won't believe, my fellow-drinkers, how full of moderation he is. I assure you that he is not at all interested in whether someone is beautiful—he looks down on that more that anyone would believe—nor in whether someone is rich or has some other distinction that ordinary people treat as a mark of happiness. He regards all those properties as worth nothing and us as actually *being* nothing, I tell you. He spends his whole life treating people with playful false pretences (*eirōneuomenos de kai paizōn*).
>
> (Plato *Symposium* 216c–e)

Insincerity

As Alcibiadas' words suggest, Plato is interested in Socrates' surface appearance as well as in his hidden qualities. Plato's recreation of that surface appearance can make it difficult for Plato's reader, no less than for Alcibiades, to see past Socrates' "false pretences." A reader of Plato will soon find passages where it is difficult to take Socrates at his word, particularly when Socrates praises his interlocutor's wisdom or describes his interlocutor as his teacher. Consider for example the following exchange between Socrates and Euthyphro (*Euthyphro* 11e–12a):

> SOCRATES: I believe you regard the discussion as beneath you, so I will eagerly join you to ensure that you teach me about piety. Don't give up too soon: see if you believe that everything pious is necessarily just.
>
> EUTHYPHRO: Yes, I do.
>
> SOCRATES: Now do you also think that everything just is pious? Or that everything pious is just, but not everything just is pious, but part of the just is pious and another part is something else?
>
> EUTHYPHRO: I don't follow what you're saying, Socrates.
>
> SOCRATES: And yet you are my junior just as much as you are wiser than me. But, as I was saying, because of your wealth of wisdom you regard the discussion as beneath you. How fortunate for you, but please exert yourself. It isn't difficult to understand what I mean.

We can imagine circumstances where an excess of wisdom causes someone to distance himself from a discussion and even where an excess of wisdom causes someone to struggle to follow a simple question, perhaps because he assumes that the simple question must be, or contain, a sophisticated and difficult question. As Socrates says, these are "fortunate" (or "blessed") states in which to be, particularly when the wisdom is about the important subject of proper dealings with the gods. But does Socrates really believe that this is why Euthyphro claims not to follow the questions?

Compare the following exchanges in Plato's *Gorgias*. Callicles, arguing that a man should not devote himself to philosophy throughout his life, urges Socrates to turn to pursuits other than philosophy, and in particular to the political pursuits that bring security and public renown. He compares himself to Zethus and Socrates to Amphion (484e, 485e), a reference to a story narrated in Euripides' *Antiope*. In this story, two brothers, the herdsman Zethus and the musician Amphion, discuss their different ways

of life, and Zethus criticizes the apparent inactivity of Amphion's life. Callicles' reprise of Zethus' criticism prompts Socrates to say that meeting Callicles is a real stroke of luck (*Gorgias* 486e–487a):

> SOCRATES: I am just thinking what a godsend it is for me to have met you.
> CALLICLES: How so?
> SOCRATES: I am sure that whenever you agree with me about what my soul believes, it follows at once that this is the very truth. For I consider that someone who is going to test properly whether or not a soul is living correctly must have three things, all of which you have, namely knowledge, good will and frankness.

On reading this we may wonder whether Socrates really believes that Callicles has the required trio of knowledge, benevolence and frankness. Our suspicion that Socrates does not really regard Callicles as benevolent and frank seems to be confirmed by a later passage in which Socrates says that Callicles was in fact being mocking or insincere (489d–e):

> SOCRATES: Please give me a gentler start to your teaching, my admirable friend, or else I will stop attending your lessons.
> CALLICLES: You're dissembling (*eirōneuēi*), Socrates.
> SOCRATES: No, Callicles, by Zethus, whom you used just now when dissembling (*eirōneuou*) at length with me.

In this later passage Socrates' own sincerity is explicitly challenged. Callicles accuses Socrates of "dissembling," or, as some but not all specialists would translate the Greek word (the same verb used when Alcibiades mentions Socrates' "false pretences") of "being ironic."

Such passages raise difficult questions for Plato's readers. Let us suppose that Socrates does not regard Callicles as his teacher, that he does not regard Euthyphro as rich in wisdom, and that he does not regard Callicles as knowledgeable, benevolent and frank. Is his real point simply that Euthyphro and Callicles lack these qualities? Or, on the contrary, that they are foolish, spiteful, and so on? Or that they have some *other* property that makes talking with them worth his while? Socrates will go on to have a long discussion with Callicles, and so perhaps he really does regard his encounter with Callicles as a "godsend," albeit for reasons other than the ones he stated. In such passages is Socrates' real meaning the *opposite* of what has been said or, less specifically, something *different* from what has been said? In asking these questions I am assuming that in each case there is an unspoken point that Plato's Socrates believes and that Plato's readers can identify. If that is correct, we must still consider whether or not Socrates wishes his *interlocutors*, Callicles and Euthyphro, to hear that unspoken message. If he does intend to convey his real message to his interlocutors, we can describe his practice as a kind of ironic communication. If not, what should we make of his insincerity? Does he intend his interlocutors to be deceived by what he says? And is the contrast between Socrates' spoken words and unspoken points solely for his own attention and, perhaps, his own entertainment?

Our answers to these questions will shape our view of how Plato is representing Socrates. If it is impossible to identify Socrates' real message and if Socratic insincerity is a

pervasive feature of Plato's dialogues, then Plato must be portraying Socrates as a very mysterious figure indeed. And if we as readers can identify Socrates' real meaning but if we suppose that Socrates does not intend his interlocutors to spot this, we shall have to suppose that Socrates is supposed to be something of a mystery to his interlocutors (albeit not to Plato's readers). Plato's Socrates emerges further from the shadows if we suppose that both his interlocutors and Plato's readers are meant to see or to work out what he really means. Vlastos was a major proponent of the last interpretation (see his 1991: Ch.1); Nehamas subsequently reinterpreted Socratic insincerity in such a way as to make Socrates an enigma once again (see Nehamas 1998: part 1). Two important recent discussions are Lane 2006 and Ferrari 2008.

Author and arguments

How should we characterize Plato's attitude to the arguments and theories that he puts into the mouths of Socrates and the other main speakers? Scholars continue to disagree about whether Plato gives these main speakers arguments and theories which he, Plato, intends his readers to find somehow deficient. Philosophers as well as specialists in ancient literature can make an important contribution to this debate, for interpreting a passage where Plato apparently indicates a deficiency in Socrates' argument requires a clear and precise sense of what Socrates' argument is, as well as of the deficiency that is apparently being indicated. One well-known approach (pursued particularly influentially in Strauss 1964) is to suggest that Plato's dialogues contain a hidden message that, despite being quite distinct from (and even incompatible with) what the main speaker says, is nonetheless accessible to careful readers of the dialogues. This approach still credits the dialogues with doctrinal content but suggests that the doctrines are accessed by indirect means. A non-doctrinal alternative is to read the dialogues as if they were intended to stimulate critical reflection without guiding that reflection to a specific outcome. See for example Cicero's suggestion that Plato's dialogues already exhibit the lack of doctrines that was a characteristic of Plato's successors in the so-called "New Academy" (see Vogt, Ch. 34 in this volume), an interpretation recorded also in an ancient commentary on Plato's *Theaetetus* (see Bastianini and Sedley 1995; for readings of Plato as a sceptic see Annas 1992 and Vogt 2012). On the strength of this Cicero suggests that the "New" Academy was not innovative but as venerable as Plato himself:

> They call this Academy "new," but it seems to me to be "old" if we count Plato as a member of the old Academy. In Plato's books nothing is asserted and much is said for either side; on every subject there is inquiry but nothing is said as being certain.
>
> (*Academica* 1.46)

It is difficult to explain why Plato continued to provide Socratic (or "Socratic") approaches to philosophical questions if he regarded Socrates' perspective as merely one perspective among many, and it is easier to explain why Plato went on exploring Socrates' thought if in Plato's view Socrates represented something of lasting philosophical value. Of course, Plato may have valued Socratic *refutation* as highly as the more positive philosophizing that he associated with Socrates: Socrates pointed the way towards the correct solution of some key philosophical problems, but also did later philosophers a service by discrediting false views and false claims (on the part of

sophists, rhetoricians and others) to knowledge and expertise. On the other hand, Plato may nonetheless have seen, or come to see, Socrates' thought as limited in various ways. This is presumably why he introduces other philosophers (Timaeus, Parmenides and the visitors from Elea and Athens) and lets them and not Socrates lead the conversation. Even in the dialogues where Socrates is the protagonist Plato may let his readers glimpse some important subjects or difficulties that Socrates has been omitting or treating inadequately. In these cases it would be simplistic either to identify Plato with Socrates or to take Plato to be subverting Socrates' arguments in their entirety.

Consider, for example, the arguments in the *Phaedo* for the immortality of the soul. Socrates is calmly awaiting execution and, when his friends are surprised by his calmness, argues that the soul is immortal and that the souls of philosophers will after death gain the wisdom that they were seeking when alive. But once Socrates has stopped arguing and drinks the hemlock, all of his friends are overcome with grief, and a rebuke from Socrates himself is needed to stop them crying (117c–e). Socrates' failure to make his friends share his equanimity shows not a logical defect in his arguments so much as a limitation. The challenge to Socrates was to show that *his own* equanimity is rational. That much is clear when Cebes and Simmias, his friends and principal interlocutors, respond to Socrates' suggestion that in life we are supervised by the gods; in that case, they ask, why is Socrates so calm about his imminent death?

> (Simmias said) "I think that Cebes is aiming his argument at you, because you are accepting without a fight your departure both from us and from those good rulers, as you yourself agree they are, the gods."
>
> (*Phaedo* 63a)

Accordingly Socrates regards his task as proving that it is rational for him, and for any genuine lover of wisdom (or "philosopher"), to meet death with good expectations. This proof is what he owes his interlocutors, who are described as his "jurors":

> (Socrates said) "To you, my jurors, I want now to give the account I owe you, of how it seems to me to be reasonable for a man who has genuinely spent his life in philosophy to be confident about his imminent death, and to be optimistic that he'll win the greatest goods there, after he's met his end."
>
> (63e–64a)

Given that the success of his arguments turns on showing the rationality of his own attitude, the grief of his friends cannot undermine those arguments. Notice that when the narrator Phaedo reports his grief-stricken reaction he makes it clear that his concern is not for Socrates but for himself:

> At least in my case the tears came flooding out in spite of myself, and so I covered my head and wept for myself—not for him, you understand, but for my own fortune, that I'd lost such a friend.
>
> (117c–d)

This is not to say that we should disregard the behavior of Socrates' friends, but merely we can give their behavior due weight without taking it to subvert Socrates' arguments. Their grief indicates Plato's awareness that Socrates' arguments for immortality do not

speak to the bereavement of friends and family. Plato does indeed communicate by means of other characters, but, at least here, in order to show that Socrates' consolation addresses only the philosopher's concerns about his own death and not in order to show that Socrates' conclusion is false or his arguments invalid.

At the center of the *Phaedo*, however, Simmias and Cebes have powerful objections (85e–88c) to one of Socrates' arguments, in which Socrates has argued that the soul's nature shows it to be immortal or at least "nearly" indestructible (80b). Like Forms, the soul is invisible, and the soul exhibits a tendency, when unimpeded by the body, to consider Forms and to share their stability (79d). (Presumably he means that as the nature of, say, goodness does not change, a soul that understands the Good will not, in relation to that Form, vacillate or change its mind.) This epistemic tendency and the soul's invisibility show a kinship between soul and Forms, which, Socrates argues, suggests that soul and Forms have in common the further property of indestructibility. In response, Simmias shows that it is possible to have the properties of a soul, or at least some of its properties, *without* being indestructible, for the "attunement" of lyres is invisible and incorporeal and yet is patently destructible. And Cebes shows that "near" indestructibility is not enough for Socrates' attitude to be reasonable; what if souls can experience a long series of bodily deaths but will ultimately perish in one of them? It would then be rational for Socrates to fear that his next death may be terminal for soul as well as body, unless (as seems unlikely) he actually *knew* otherwise. These objections prove decisive, and Socrates has to try again. He continues to consider the nature of soul, but now focuses not on its invisibility but on its being the cause of life and, prefacing his new discussion of soul with a long discussion of causes, argues that *this* property of soul really does entail immortality. Socrates' interlocutors, or at least Cebes (107a), are then convinced. Clearly Plato is sometimes willing to give Socrates a bad argument, although he also shows that, assisted by the criticism of his friends, Socrates can produce a cogent replacement.

In some dialogues Socrates' arguments are never openly criticized, but we may nonetheless be encouraged to notice that Socrates' discussion misses an important point, as for example in Socrates' discussion of rhapsody (the oral performance and discussion of poetry) in the *Ion*. Socrates speaks with Ion, a successful rhapsode specializing in Homeric poetry, and in the course of their conversation establishes that Ion's success is not the result of a genuine skill or expertise. At one point Socrates asks which parts of Homer's poems belong to Ion's particular expertise. A doctor can evaluate the passages where a potion is described, for the doctor knows whether such a potion would really work; a fisherman can explain and evaluate Homer's description of a fishing line sinking underwater, for a fisherman would be able to say whether the description is accurate. But which parts of Homer's poems are for Ion and not for these experts to discuss? Ion tries three answers. His first answer, "all of them" (539e) conflicts with their previous agreement that each expertise has its own distinct subject matter; Ion's third answer is that he can evaluate the speeches given by Homeric generals (540d), and, when questioned about this, he soon makes the absurd claim that, as a good rhapsode, he would be a good general. But Ion's second answer is more promising:

> SOCRATES: Which kind of things will the rhapsode know, since he does not know all of them?
> ION: The things, I suppose, that are suitable for a man (the Greek may mean "husband") to say and the sort of things suitable for a woman (or "wife") to

> say, and the sort suitable for a slave and for a free man, and the sort suitable for a subject and for a ruler. (540b)

It is not difficult to see how Ion could have developed this point. If we want to be told whether Homer makes each character speak appropriately, we need someone who, like Ion, can instantly recall the Homeric passages where, say, people in authority speak and who can show whether the speeches given by these people have any distinguishing features in keeping with the speakers' authoritative position. But Socrates takes the discussion in a different direction:

> SOCRATES: Take a ruler of a ship in a storm at sea—do you mean that the rhapsode will know better than the steersman what sort of thing he should say? (540b)

When Ion says "ruler" Socrates thinks of an *expert* in a position of authority, in this case a nautical expert. Similarly when Ion says "slave," Socrates thinks of an expert in a menial position:

> SOCRATES: For example, take a slave who is a cowherd—do you mean that the rhapsode and not a cowherd will know what the slave should say to calm down cows who are getting restless? (540c)

Ion has to say "no."

Ion's suggestion that he can judge the suitability of what characters say almost brings into the discussion an activity for which Ion seems particularly qualified, but his suggestion is interpreted strangely by Socrates and so does not get a proper hearing. As in our examination of the *Phaedo*, in order to see whether this passage is intended by Plato to subvert Socrates' arguments we need a firm grasp of what Socrates is arguing. Socrates argues not that there is *no* activity at which Ion excels but that Ion's success is not the result of expertise. If Ion is to show that Socrates is wrong, he needs to show not merely that there is something that he can do particularly well but that his ability is the result of expertise. So the passage does not in itself show that Socrates' conclusion is false. We may nevertheless be shown a limitation of Socrates' approach. Since the start of the dialogue Socrates' discussion has focused on expertise, and now his preoccupation with expertise manifests itself as an inability to view the kinds of character in Homer as anything other than candidates for expertise—women as weavers (540c), slaves as herdsmen (540c), and so on. Socrates is engrossed by the distinction between experts and non-experts, and a thinker like that is unlikely to get very far when trying to appreciate what Ion really can do.

Context

One striking consequence of writing in dialogue form is that arguments and theories are put forward by particular individuals, such as Socrates, and are addressed to other particular individuals, such as Ion or Simmias. Sometimes, but not always, the start of a Platonic dialogue, or the start of an important section, focuses the readers' attention on the particular characters present and on the particular place where the conversation is held. The very start of Plato's *Protagoras* is given fairly thin contextualization (an unnamed

friend or friends meet Socrates at an unspecified place and want to gossip about Alcibiades), but setting and participants are characterized much more richly when Socrates then describes his recent encounter with Alcibiades and Protagoras. First, Socrates narrates, Hippocrates rushed into Socrates' house early in the morning and asked Socrates, who was still in bed, to help him become Protagoras' pupil (310a–311a); they talked in the courtyard of Socrates' house, and then went to much grander surroundings, the house of the wealthy Callias, where some entertainingly described Sophists were at that very moment busily educating their students (314c–316a).

When reading a dialogue like the *Protagoras* it is natural to wonder to what extent and in what ways the context has affected Socrates' arguments. There are of course "contextual" constraints in any conversation, as Socrates knows very well. As he says in the *Meno* (75c–d), one should use only words that the other party, if questioned, would say he understood, and, as he tells his accuser Meletus during their strained conversation in court, answers must address the specific question that the questioner had in mind (*Apology* 24d–e). But sometimes the importance of context may extend further, such as when Socrates is required to put forward claims that he regards as unsubstantiated or to argue from premises that he himself does not believe. In the *Protagoras*, Socrates is challenged by Protagoras to discuss a poem of Simonides and then talks at length about the poem's meaning (342a–347a). When the exegesis of Simonides is over, however, he says that it is impossible to establish with certainty what poets means (347e), which suggests that the exegesis was mere speculation. Soon afterwards Socrates argues that "ordinary people" are hedonists and shows Protagoras that the hedonism of ordinary people commits them to Socrates' own view of the importance and value of knowledge (352e–357e); scholars working on the *Protagoras* do not agree whether Socrates is committing *himself* to hedonism or is merely showing ordinary people the implications of *their* hedonism. On the second interpretation, Socrates may be acknowledging tacitly that the only way to convince non-intellectuals is to start from their beliefs, even when he finds their beliefs false and perhaps morally repellent.

The relationship between argument and context varies, however, and sometimes the arguments are not so much context-dependent as context-supported. For example, the conversation of the *Republic* takes place in the household of Cephalus and of his son Polemarchus. Plato's original readers would have known that a sad fate awaited that household. Shortly before Socrates' death Athens was briefly ruled by a group of oligarchs known as the Thirty, and during their bloody reign many Athenians were executed without trial, including Polemarchus himself, who according to his brother Lysias (12.16–20) was denied even a proper funeral. Polemarchus is an important interlocutor in the first book of the *Republic*, and when he first meets Socrates he is accompanied by Niceratus (327c), yet another victim of the Thirty (Plutarch *Moralia* 998B; see also Xenophon *Hellenica* 2.3.39). So the setting of the *Republic*, namely a household that was to suffer under the Thirty, and two of the men present, Polemarchus and Niceratus, remind Plato's readers of one of the most unpleasant chapters of Athens' political history. Why does Plato start his work with this grim reminder? Plato may seek to emphasize the importance of political stability and of social cohesion by putting his readers in mind of the disastrous consequences of their absence. During the discussion of the *Republic* Socrates will argue in favor of a new and radically undemocratic regime in which political stability and social cohesion are of paramount importance. Cephalus' house and its poignant associations show the need for this kind of radical departure from previous Athenian politics.

Sometimes, when reading a Platonic dialogue, we may find ourselves wondering whether *other* dialogues provide the relevant context. (Contrast the title of Tejera 1999.) This experience is particularly common when reading later dialogues, such as the *Parmenides*, where Socrates echoes the discussion of Forms in the *Phaedo*, and the *Laws*, which describes as the "first" or best city one in which exclusive marriages and private property, which were forbidden for Guards in the *Republic*, are abolished (so far as is possible) throughout the entire community (739b–e). This passage in the *Laws* may constitute an actual reference by Plato (though not of course by the speaker) to the text of the *Republic*. Sometimes there is no intertextual reference or allusion but we may nonetheless want to bring in another dialogue to aid philosophical interpretation. In the passage from the *Euthyphro* quoted above (11e–12a) Socrates gets Euthyphro to consider piety *as a part of justice*. Why does Socrates take the inquiry in this direction? Socrates' motivation looks either theological or casuistical; that is, he may believe that the best way to please the gods is to act justly, or he may believe that conflicts of duty like the one faced by Euthyphro (if one's own father is responsible for a death, should one prosecute him?) are resolved not by religious lore, as Euthyphro believes, but by a proper understanding of justice. But if we look outside the *Euthyphro* to the *Protagoras*, it looks as if Socrates' intervention is motivated not only by theology or casuistry but also by an unorthodox theory of virtue. In the *Protagoras* Socrates argues that justice and piety are closely similar or even identical (330b–332a), and this is the opening move in an attempt to convince Protagoras that the virtues are not as dissimilar and distinct as Protagoras has suggested. Our view of the proper context can thus make a significant difference to our view of Socrates' philosophical motivation. The only prudent course is to keep in mind both the immediate context of the *Euthyphro* and the broader Platonic context. When reading Plato we should always acknowledge the importance of context, but we should not be dogmatic or inflexible about the relationship between arguments and their context—or about the kind of context that matters.

References and further reading

References

Annas, J. (1992) "Plato the Sceptic," in J. C. Klagge and N. D. Smith (eds) *Methods of Interpreting Plato and His Dialogues*, *Oxford Studies in Ancient Philosophy* supplementary volume, Oxford: Clarendon Press.

——. (1999) *Platonic Ethics, Old and New*, Ithaca, NY, and London: Cornell University Press.

Bastianini, G. and Sedley, D. N. (1995) "Anonymous, *Commentarium in Platonis 'Theaetetum*," *Corpus dei papiri filosofici greci e latini*, 3, Florence, 227–562.

Boys-Stones, G. and Rowe, C. (2013) *The Circle of Socrates: Readings in the First-Generation Socratics*, Indianapolis: Hackett.

Burnyeat, M. F. (1997) "First Words: A Valedictory Lecture," *Proceedings of the Cambridge Philological Society*, 43: 1–20.

Ferrari, G. R. F. (2008) "Socratic Irony as Pretence," *Oxford Studies in Ancient Philosophy* 34: 1–33.

Ford, A. (2008) "The Beginnings of Dialogue: Socratic Discourses and Fourth-Century Prose," in S. Goldhill (ed.) *The End of Dialogue in Antiquity*, Cambridge: Cambridge University Press.

Kahn, C. H. (1996) *Plato and the Socratic Dialogue: The Philosophical Use of a Literary Form*, Cambridge: Cambridge University Press.

Lane, M. (2006) "The Evolution of *Eirôneia* in Classical Greek Texts: Why Socratic *Eirôneia* is Not Socratic Irony," *Oxford Studies in Ancient Philosophy* 31: 49–83.

Nehamas, A. (1998) *The Art of Living: Socratic Reflections from Plato to Foucault*, Berkeley, CA: University of California Press.

Scott, G. A. (ed.) (2007) *Philosophy in Dialogue: Plato's Many Devices*, Evanston, IL: Northwestern University Press.
Sedley, D. N. (2000) "Three Platonist Interpretations of the *Theaetetus*," in C. Gill and M. M. McCabe (eds.) *Form and Argument in Late Plato*, Oxford: Clarendon Press.
Strauss, L. (1964) *The City and Man*, Chicago, IL, and London: University of Chicago Press.
Tarrant, H. (2000) *Plato's First Interpreters*, London: Duckworth.
Tejera, V. (1999) *Plato's Dialogues One by One: A Dialogical Interpretation*, Lanham, MD: University Press of America.
Vander Waerdt, P. A. (ed.) (1994) *The Socratic Movement*, Ithaca, NY, and London: Cornell University Press.
Vlastos, G. (1991) *Socrates: Ironist and Moral Philosopher*, Cambridge: Cambridge University Press.
Vogt, K. M. (2012) *Belief and Truth: A Skeptic Reading of Plato*, New York, NY, Oxford: Oxford University Press.

Further reading

Beversluis, J. (2000) *Cross-examining Socrates: A Defense of the Interlocutors in Plato's Early Dialogues*, Cambridge: Cambridge University Press.
Clay, D. (1994) "The Origins of the Socratic Dialogue," in P. A. Vander Waerdt (ed.) *The Socratic Movement*, Ithaca, NY, and London: Cornell University Press: 23–47.
——. (2000) *Platonic Questions: Dialogues with the Silent Philosopher*, University Park: Pennsylvania State University Press. (A discussion of drama and literary context as well as of the dialogues' philosophical content.)
Ferrari, G. R. F. (2000) Review of Press 2000, *Bryn Mawr Classical Review* 2000.11.10. (Discusses the relationship between the form of Plato's works and their intellectual commitments.)
Frede, M. (1992) "Plato's Arguments and the Dialogue Form," in J. C. Klagge and N. D. Smith (eds) *Methods of Interpreting Plato and His Dialogues*, *Oxford Studies in Ancient* Philosophy supplementary volume, Oxford: Clarendon Press: 201–20. (Argues that Plato wrote in dialogue form in order avoid presenting himself as an authority.)
Gerson, L. P. (2000) "Plato *Absconditus*," in G. A. Press (ed.) (2000) *Who Speaks for Plato? Studies in Platonic Anonymity*, Lanham, MD: Rowman and Littlefield: 201–10.
Griswold, C. L. (ed.) (2002) *Platonic Writings, Platonic Readings*, University Park: Pennsylvania State University Press. (A collection of papers that illustrates a wide range of approaches to the dialogues.)
Guthrie, W. K. C. (1975) *A History of Greek Philosophy, vol. 4: Plato, The Man and His Dialogues, Earlier Period*, Cambridge: Cambridge University Press. (See particularly chapter 3 for the dialogues' chronology and the notion of "play.")
Kahn, C. H. (2002) "On Platonic Chronology," in J. Annas and C. Rowe (eds) *New Perspectives on Plato, Modern and Ancient*, Cambridge, MA, Harvard University Press for Center for Hellenic Studies: 93–127. (A critical discussion of the chronological basis of "developmental" readings.)
Klagge, J. C. and Smith, N. D. (eds) (1992) *Methods of Interpreting Plato and His Dialogues*, *Oxford Studies in Ancient Philosophy* supplementary volume, Oxford: Clarendon Press.
Partenie, C. (ed) (2009) *Plato's Myths*, Cambridge: Cambridge University Press.
Press, G. A. (ed.) (2000) *Who Speaks for Plato? Studies in Platonic Anonymity*, Lanham, MD: Rowman and Littlefield. (A varied collection of papers on the significance of dramatic form.)
Rowe, C. (2007) *Plato and the Art of Philosophical Writing*, Cambridge: Cambridge University Press. (A recent challenge to "developmental" readings.)
Rutherford, R. B. (1995) *The Art of Plato: Ten Essays in Platonic Interpretation*, London: Duckworth. (A literary study that emphasizes the importance of the arguments' context.)
Sayre, K. (1995) *Plato's Literary Garden: How to Read a Platonic Dialogue*, Notre Dame: Notre Dame University Press. (Uses the *Phaedrus* and the *Seventh Letter* to guide our reading of the dialogues.)
Szlezák, T. A. (1999) *Reading Plato*, London and New York: Routledge. (A defense in English of the interpretation, now associated with the University of Tübingen, according to which Plato's dialogues point to a body of oral teaching.)
Tigerstedt, E. N. (1977) *Interpreting Plato*, Uppsala: Almqvist and Wiksell. (A critical survey of interpretative approaches.)
Young, C. M. (1994) "Plato and Computer Dating: A Discussion of Gerard R. Ledger, *Re-counting Plato: A Computer Analysis of Plato's Style*, and Leonard Brandwood, *The Chronology of Plato's Dialogues*," *Oxford*

Studies in Ancient Philosophy 12: 227–50. (Another discussion of the dialogues' relative chronology.)

Related chapters

8. Socrates: sources and interpretations
10. Plato on philosophical method: enquiry and definition
11. Plato's epistemology
13. Plato on virtue and the good life
14. Plato: philosopher-rulers
15. Plato's metaphysics

10
PLATO ON PHILOSOPHICAL METHOD: ENQUIRY AND DEFINITION

Raphael Woolf

I

The topic of this chapter is enquiry and definition, and the depiction of enquiry with the goal of attaining a definition, particularly of a virtue, is an important feature of many of Plato's dialogues, especially those with Socrates as the leading character. Accordingly, I will focus my remarks in this chapter on those works in which Socrates takes the main role, though I will have something to say about other dialogues too.

The vehicle by which Socrates conducts his enquiries is generally known as the "*elenchus*" (a term derived from a Greek word that can mean, among other things, "testing" or "refutation"). Now, the details of Socrates' method of enquiry have been much debated, including the issue of whether he can be said to have a single method of enquiry at all that can be labeled "the" elenchus. For present purposes, I shall state roughly and dogmatically (though not, I think, misleadingly) that a typical elenchus conducted by Socrates consists in his eliciting a certain opinion from an interlocutor, often concerning the nature of some important ethical property such as courage or piety. He then brings the interlocutor to assent to propositions that are inconsistent with that initial opinion.

What exactly Socrates thinks he has achieved in doing this is, again, a matter of debate. Does he think that he has disproven the original hypothesis that the interlocutor put forward? Or does he merely think that he has demonstrated that, in being drawn into expressing a set of inconsistent beliefs, the interlocutor is confused about the question? One way of putting the issue is in terms of whether Socrates regards the elenchus as primarily "personal" or not—a way of revealing something about the state of mind of the interlocutor, rather than the truth or falsity of particular propositions.

A work of important evidential value in assessing the status of the elenchus in this regard is the *Apology*. This is Plato's version of the defense speech given by Socrates at his trial for impiety and corruption of the young. Historically, we cannot know how closely it resembles the actual speech Socrates may have given, though we do know that Socrates was found guilty of the charges, condemned to death, and subsequently executed. What the *Apology* does provide us with is a description by Socrates of his aims and method as Plato saw them.

Socrates tells us that his friend Chaerephon visited the Oracle at Delphi and asked whether there was anyone wiser than Socrates, to which the Oracle replied that no one was (20e–21a). Socrates is puzzled by the response, since he takes himself to lack wisdom (21b). To try to discover the Oracle's meaning, he questions a series of people and realizes thereby that, at least when it comes to the important moral questions, they are as ignorant as him, except that, unlike him, they are not aware that they are ignorant (21b–22e). Thus, in being aware of his own ignorance, Socrates is wiser than they are (23b). As a result, Socrates takes it as a god-given mission laid down for him by the Oracle to stir people up by questioning them, make them aware that they don't know the answers to life's most important questions, and thus (he hopes) encourage them to take better care of themselves than they have hitherto done (29d–e). In terms of Socrates' account in the *Apology*, he seems to see the purpose of the elenchus as primarily personal. It is an interlocutor's state of mind—his ignorance—that he aims at revealing, and not primarily the truth or falsehood of certain propositions.

This is not to deny that Socrates at times presents himself as having refuted the suggestions of an interlocutor, rather than just having shown that they are inconsistent with other beliefs that the interlocutor holds. Take, for example, Charmides' initial attempt in the *Charmides* at saying what the virtue of temperance is. Charmides suggests it is modesty, but Socrates secures his agreement that temperance, as a virtue, must be a good thing, and that modesty is not always a good thing. If that is correct, then temperance would not be modesty, Socrates concludes (160e–161b).

Most likely Socrates finds the two propositions to which he gains Charmides' assent to be plausible. One of the strengths of the elenchus is that it often (though by no means always) rests on quite reasonable propositions in exposing difficulties with an interlocutor's initial claim. But it also seems right to say that whether or not Socrates holds such propositions to be true is not in general to the fore. It is, rather, Charmides in our example who finds himself unable to deny them. If another interlocutor wished to assert, say, that modesty is always a good thing, the debate would have to re-open. What Charmides has been shown is that, as things stand, *he* cannot reasonably uphold the thesis that temperance is modesty given other things he believes. He has thus been shown that he lacks knowledge and needs to enquire further. The elenchus, as we would expect from the evidence of the *Apology*, is personal, and its purpose is to motivate the interlocutor to enquire rather than establish certain propositions as true or false.

The provisional status of the conclusions that Socrates does draw is made evident even on those occasions when he claims with some vigor to have proved something. At *Gorgias* 479e, for example, he says that the theses, argued with Polus, that doing wrong is worse than suffering it, and that escaping punishment is worse than being punished, have been proved true. At 508e–509b, in his discussion with Callicles, he reiterates those conclusions and says flamboyantly that they have been secured "with arguments of iron and adamant," but immediately adds the qualification "so at least it would seem" and proceeds to assert that if Callicles or someone still bolder cannot dissolve them they will stand. The personal dimension is thus reaffirmed: Callicles could not sustain his position, but perhaps someone yet more radical (however unlikely Socrates thinks the possibility) could. We as readers are reminded that Socratic enquiry remains driven by the exploration of what a given individual can and cannot coherently maintain.

II

The ingénu Charmides provides perhaps a rather favorable example for my reading, though I have tried to indicate that even Socrates' approach to the more formidable Callicles does not undermine it. Another elaborate passage that might seem to tell against this reading is Socrates' famous discussion with Protagoras in the *Protagoras* about whether it is possible to act other than in accordance with one's knowledge or belief about what it is best to do—whether, as scholars sometimes put it, it is possible to act "akratically" or with weakness of will. This looks to be a promising text if one is inclined to see Socratic enquiry as concerned with the establishment of substantive doctrines—and the thesis Socrates and Protagoras discuss is certainly substantive, given that most people's intuition is that acting akratically is perfectly possible. To take a simple example, it seems undeniable that I could be convinced that the best thing to do now is to take some exercise, yet despite this remain lying lazily on the sofa watching television.

Now one of the striking features of the argument at *Protagoras* 352e–357e is that it appears to rest on the supposition that hedonism is true—that is, that goodness and pleasure are to be identified. In brief, Socrates argues that if hedonism is true, then the idea of akratic action as, at any rate, the failure to do what is good because one is overcome by pleasure—a very reasonable way of characterizing at least one important strand of the phenomenon—is nonsensical. If hedonism is true, then goodness and pleasure cannot come apart. Being overcome by pleasure only makes sense as the idea that a stronger pleasure overcame a better alternative. If hedonism is true then the stronger pleasure just *is* the better alternative, so that the action one perceived as better (that is, as more pleasant) will in fact be the one chosen, contrary to the commonsense hypothesis.

The question now for our purposes is: does Socrates endorse hedonism in his own name here? Assume that the basic structure of his argument is as follows:

1. If hedonism is true then akrasia is impossible.
2. Hedonism is true.
3. Akrasia is impossible.

Does Socrates endorse 2? This is a question that has exercised interpreters quite considerably. If he does endorse it, then it is reasonable to infer that he endorses the conclusion, since (as we are assuming) his argument against the possibility of akrasia is based on the premise of hedonism. If he does not endorse it, then there is no reason to suppose that he is doing anything more than revealing Protagoras' own confusion. For Protaoras has maintained, in opposition to Socrates' proposal that all the virtues are the same and are to be identified with knowledge, that courage at least is not the same as the other virtues in this regard (349d). If he can be led to accept that akrasia is impossible, then he will have to admit that courage too is a kind of knowledge. Thus Socrates gets Protagoras to agree that, if their demonstration was correct that no one acts against what they think is best, the courageous cannot be distinguished from the cowardly in terms of one of those groups acting in *that* way and the other not. So the explanation of why the two groups act differently from each other must be that while both indeed act in accordance with what they think is best, the courageous know what is best, and the cowardly do not (359c–360e).

One reason for thinking that Socrates does not endorse hedonism is that elsewhere he fiercely attacks certain hedonistic positions—most notably that set out by Callicles in the *Gorgias*. This evidence in turn, however, need not be decisive, firstly because the hedonism espoused by Callicles is not obviously the same as that set out in the *Protagoras*; and secondly because, as we saw above, we need to ask whether even in the *Gorgias* Socrates sees the purpose of his enquiries as the establishment or refutation of substantive theses, rather than the revealing of intellectual confusion on the part of his interlocutor.

Just before the argument about akrasia, Socrates compares what he is about to do with the activity of a doctor who moves from examining a patient's face and hands to examining his chest "in order to scrutinize more clearly" the patient's state of health (*Protagoras* 352a). Socrates thereby indicates that analogously he is engaged in examining Protagoras' state of mind, and that the scrutiny is about to intensify. In the *Charmides*, Socrates proposes in like manner to Critias that they strip down Charmides not just to his body but to his soul as well, so they can see what kind of shape it is in (154e).

III

I propose, then, that exposure of the interlocutor's state of mind—in particular his ignorance—is the leading motive of Socratic enquiry. What is Plato's purpose in depicting it thus? Two related and plausible answers suggest themselves: firstly, to advocate the idea that enquiry is open-ended. If Socrates' main aim were taken to be the proof or disproof of propositions, for which a treatise may have served as well as or better than a dialogue, this would give the misleading impression that questions can be settled in one session of debate. Plato's message is that enquiry is ongoing, because the questions are difficult, and because a sense that finality has been reached is almost inevitably premature.

Secondly, Plato aims to draw his readers into the debate and make them active participants rather than passive spectators. Consider again the question of whether Socrates is committed in the *Protagoras* to the thesis of hedonism. It seems to me that the combination of the vigor with which Socrates sets out this position and the elusiveness of his own commitment to it (a pairing certainly not unique to this passage or this dialogue) is ideally suited for provoking a reader into considering the plausibility of the position for themselves and its implications for other positions to which it relates.

The *Protagoras* ends by suggesting that both Protagoras and Socrates have unresolved conflicts: Protagoras in claiming that virtue *is* teachable but that it is *not* to be identified with knowledge; Socrates in claiming that it is *not* teachable but that it *is* to be identified with knowledge (361a–c). None of these four propositions are presented as proven or disproven; the moral Socrates draws is that given this state of mutual confusion there is need to enquire further (361d). The reader is thereby invited to join in the diagnosis of the confusion and take the enquiry forward for themselves.

Nonetheless, there are dialogues featuring Socrates as the leading character whose enquiries seem to aim much more at establishing and (to a lesser extent) refuting theses than revealing anything in particular about the state of mind of the participants. The *Republic* and the *Phaedo* appear to fall into this category, for example. In contrast to the many dialogues that do not arrive at settled answers (the so-called "aporetic" dialogues, among which we may number, apart from the *Charmides* and *Protagoras*, the *Laches*, *Lysis*, *Ion*, *Euthyphro*, *Hippias Major* and *Hippias Minor*; and, though probably from a different stage in Plato's writings, the *Theaetetus*), there is no question that these two

works do appear to reach substantive conclusions on a range of issues, and seem to have much less interest in exposing, in an adversarial manner, intellectual confusion on the part of the interlocutor.

A noticeable fact about many of the dialogues is that they offer little prospect that Socrates has actually had the effect he wishes to have, and made his interlocutors more devoted to a life of critical enquiry and self-examination. The *Theaetetus* (which, unlike the other aporetic works, was almost certainly written after the *Phaedo* and *Republic*) has in Theaetetus an interlocutor who already seems open to the need for enquiry. As for the rest, Protagoras in the *Protagoras*, though he seems genuinely to admire Socrates, and even offers to resume the discussion at a later date, seems happy enough to let things go while Socrates would prefer to continue (361d–e). Euthyphro, Hippias and Ion, despite being ruffled at times by Socrates' arguments, seem in the end to have had their intellectual complacency barely dented. A promising youth such as Charmides (historically Plato's uncle, in fact) ends up in later life playing a leading role in the savagery of the Thirty Tyrants, as Plato was well aware when he wrote the dialogue. Callicles at the end of the *Gorgias*, a work that is not overtly aporetic and in which Socrates does claim, as we have seen, to have proved something, displays at best a sullen acquiescence, with no apparent appetite to seriously rethink his views.

In the light of this, works such as the *Republic* and *Phaedo* stand together with the more antagonistic dialogues we have been discussing as jointly offering a critical stance on Socrates' mission. We see in the latter group Socrates trying and mostly failing to convert interlocutors to the spirit of critical enquiry; we see in the former pair (as in the *Theaetetus*) enquiry carried on by Socrates with interlocutors broadly sympathetic to his project. What we do not see is what Socrates maintains was his life-long mission: to actually win over to the path of enquiry those who had no awareness that they were in need of it.

In the *Republic*, in fact, we find both extremes juxtaposed. After an unsatisfactory encounter in book one with the obnoxious but spirited Thrasymachus, who is browbeaten but hardly convinced by Socrates' initial defense of justice, Socrates turns in the remainder of the work to debate with the more friendly Glaucon and Adeimantus (historically, Plato's brothers). Intriguingly, Thrasymachus is referred to on several occasions in the course of the debate as still being present, and on one occasion (450a–b) speaks briefly to add his voice urging Socrates to describe the ideal city more fully. Socrates says at 498d that he and Thrasymachus are now "friends," but how reliable is Socrates as a narrator? We don't have Thrasymachus' word that the bond of friendship is established, and an impartial reader may wonder whether, despite his continuing presence, a virtually unbroken silence can count as evidence of a newly minted partisan of Socratic enquiry (in the *Phaedrus* Thrasymachus is mentioned as a leading teacher of rhetoric).

The absence of clear cases of Socratic success indicates that Plato may not have the same enthusiasm for the practice of adversarial enquiry that Socrates has himself. Even Socrates seems at one point in the *Republic* to be intent on "taming" the practice in the ideal city when he lays down restrictions on oral argument to those of a suitable age and character (539a–d). So there may be an element of self-criticism here, though it is not clear whether his prescription is supposed to (or could) apply outside the city.

What we as readers undergo is not direct confrontation with Socrates, but engagement, at one remove, with a written depiction of what such confrontation may have been like. Plato's use of the dialogue form is designed to draw his readers into the process

of enquiry, but the fact that it places us at the edge of, rather than in the midst of, the heat of a Socratic interrogation may be Plato's way of attempting rather more motivational success with the readers who encounter his works than Socrates found with the interlocutors who encountered him. Live adversarial exposure of a person's ignorance may not, in general, be the best way to secure converts to the cause of philosophy, however much (we may speculate) it succeeded in winning over Socrates' greatest admirer and critic, Plato himself.

IV

One of Socrates' favorite modes of interrogation within the dialogues is to ask an interlocutor, about some particular item, "What is it?" Several dialogues focus explicitly on addressing "What is it?" questions, often though not exclusively about some moral property. Thus the *Charmides*' main topic is "what is temperance?" The *Laches* poses the question "what is courage?", while the *Euthyphro* asks "What is piety?" The *Republic* asks "What is justice?" the *Theaetetus* "What is knowledge?" and the *Gorgias* "What is rhetoric?" Even dialogues not explicitly driven by this form of question regard it as in some sense primary—this is connected with the thesis sometimes attributed to Socrates known as "The Priority of Definition," which I shall return to below. Thus both the *Protagoras* and the *Meno* end with Socrates affirming that the question "What is virtue?" needs to be answered before the question "Is virtue teachable?" can properly be addressed.

The dialogues' exploration of these questions can prove amazingly fertile both about and beyond the overt topic in hand, and it seems to me that we are justified in regarding the "What is it?" question as perhaps the most persistent theme of Socratic enquiry. So what is the force of the question and why is it of importance to him? To define, in a fairly literal sense, is to mark a thing off from other things. Definition is concerned with finding a formula that picks a thing out, identifying it in such a way that it is distinguished from other things. This, I think, captures a significant part of what Socrates is getting at in asking his "What is it?" question.

The question matters because an inability to identify a thing means in turn that we are liable to confuse it with other things. The stakes are high if what we are seeking to identify is itself something that is at the heart of living a good human life. If, for example, we think, as Socrates does, that living virtuously is of supreme importance, then an inability to tell what is virtuous from what is not will severely undermine our efforts to live well. As Socrates says to Euthyphro (6e):

> Teach me what the very form [of piety] is, so that … I may say that whatever it is you or anyone else does that is of that sort is pious, and whatever is not of that sort is not pious.

At the end of the *Euthyphro* Socrates expresses his disappointment that Euthyphro has not been able to give him such an answer, one that might have enabled him to "live better for the rest of my life" (16a). One need not regard Socrates as ever having hoped that Euthyphro could provide such an answer to be able to appreciate why its possession might have a purpose and importance of the kind that Socrates indicates.

What, then, counts as a good definition of this kind? We get a number of clues from remarks that Socrates makes when casting doubt on the success of his interlocutors'

attempts to supply one. First, a definition must be *exhaustive*: it must cover *all* cases of the thing that the definition is purporting to define. Interlocutors often (at times because they are not clear what exactly they are being asked for) give as their initial reply to a "What is it?" question answers that fail the exhaustiveness test. Thus Laches replies that courage is remaining at one's post in battle (*Laches* 190e). Socrates points out, and Laches concurs, that it is possible to be courageous in retreat too (191a–b), so Laches' answer is inadequate because it fails to cover all cases of courage.

Having a formula that is not exhaustive will mean that one is liable to say, of something that in fact is a case of courage (or whatever it may be), that it is not. Of course, it is unlikely that Laches, even without Socrates' correction, would refuse to call any other behavior than remaining at one's post a case of courage. And his initial answer is by no means an absurd one, since it seems to provide a paradigm case of courage. But that in turn illustrates, as it was presumably meant to, that if one is to identify courage without error, a reliance on central, even indubitable, examples alone is insufficient.

The second major requirement for a good definition is that it be *exclusive*—that it cover *only* cases of the thing one is attempting to define. Recall Charmides' proposal that the virtue of temperance is modesty, and his subsequent agreement that modesty is not always a good thing and so cannot be a virtue. By implication, identifying temperance with modesty will fail to exclude cases that are not temperance. Reliance on an account that breached the requirement of exclusiveness would mean that one would be liable to say, of something that is not a case of temperance (or whatever it may be), that it is. As in the case of Laches' reply that courage is staying at one's post, Charmides' response about temperance is far from absurd. Part of Plato's skill is to allow the interlocutors sensible enough suggestions to engage the reader in the issue. We can see that as Laches would need to expand his response to turn it into an adequate definition, so Charmides would need to refine his to achieve a similar outcome.

V

There is at least one further requirement on definition to be gleaned from Socrates' discussions, albeit slightly less straightforward to characterize than the first two. A good definition, we may say, must capture what is fundamental to the thing being defined. Imagine that it were true (as of course it actually is not) that all and only cases of courage involved a mild clenching sensation in the stomach of the agent. We would, at least within our thought experiment, have met the exclusiveness and exhaustiveness requirements, but be left with the nagging feeling that something was missing with a definition of courage as "a mild clenching sensation in the stomach." One reason for our dissatisfaction would be that courage, as a virtue, must be a good thing, and there is nothing particularly good about a mild clenching sensation in the stomach. The proposed definition is uninformative because it misses something basic to courage, namely its goodness.

A definition that met this requirement in a wholly satisfactory way would have to reveal not just what it is about courage that makes it good, but what is *distinctively* good about it. Laches' second attempt at defining courage, as a kind of mental endurance (192b), is more promising in this regard, not only because we would be more inclined to see mental endurance as a good thing than we would to see a mild clenching sensation in the stomach that way, but also because the idea of mental endurance seems to get close to capturing the distinctive sort of good quality that is fundamental to the

notion of courage. Since, as Socrates goes on to point out, Laches' second proposal fails the exclusiveness test because some cases of mental endurance are foolhardy and not therefore good (192c–d), it cannot quite capture what the goodness of courage consists in; but again, refinement rather than outright abandonment looks a viable option.

The *Euthyphro* contains the most explicit consideration of the requirement that a definition capture what is fundamental to the thing being defined. Euthyphro has claimed that what is pious is what is loved by the gods (9e), but Socrates then secures his agreement that something that is loved by the gods is loved because it is pious; it is not the case that a thing is pious because it is loved by the gods (10d). Euthyphro, says Socrates, has thus given only an "attribute" (*pathos*) of piety, not the "being" (*ousia*) of piety (11a). Socrates' complaint, as indicated by his causal language, is that Euthypro has given him an effect of piety: its arousing the love of the gods. What they are after, however, is what is responsible for that effect: what makes piety the distinctive virtue that it is, such that the gods respond to it as they do.

It is not accidental to its rejection that Euthypro offered a relational property as a definition of piety. If piety were the same thing as being loved by the gods, then identifying what is pious would be a matter of identifying what the gods love, so one would need to pick out the gods, their attitude of love, and the things to which that attitude was directed. Socrates' intuition is that a relation cannot capture what is basic about something. What is basic or fundamental to a thing must be intrinsic to it, identifiable independently of other things to which it might be related.

VI

Socrates' contention that in order to be able reliably to identify cases of, say, a particular virtue, one must have an exclusive and exhaustive definition of that virtue, is, I think, reasonable. As for the requirement that definition capture what is fundamental about the thing in question, it seems that if this is missed I have failed to discern what the thing really is, so my getting cases of it right, even if I do this without exception, will in an important sense be accidental and not, strictly speaking, reliable.

At times, however, Socrates seems to make a stronger and stranger claim about the need for definition, namely that without having a satisfactory answer to the "What is it?" question, one cannot know anything else about the thing that we are investigating. At the beginning of the *Meno* Socrates responds to Meno's question about whether virtue is teachable with the assertion that he cannot know *that* without knowing what virtue is (71a–b). The claim that one cannot know anything about a thing unless one has defined it is a version of a principle that has been dubbed "The Priority of Definition."

Socrates expands his point by asking Meno how anyone who did not know at all who Meno was could know whether he was handsome or rich or well-born (71b). This is not an especially controversial point: if I have no idea who or what it is we are talking about, then I am not in a position to know what any of its qualities are. It seems obvious that if, say, I simply have no idea who Bill Gates is, then I could not know whether he is rich or, for that matter, handsome. But Socrates seems to be implying something more: that unless I can define or (in the case of individuals) identify the object in question, then I cannot know any of its qualities.

There is clearly still something right about this. If I cannot pick Meno out then it seems reasonable to infer that I am in no position to know whether he is handsome. On the other hand, I can perfectly well know that Bill Gates is rich without, say, being

able to pick him out in an identity parade or identify him from a photograph. So let us retreat to the less contentious claim that if I have no idea who or what a thing is I cannot know anything about it. Socrates proclaims that he has no idea what virtue is (71a), so cannot tell Meno whether or not it is teachable. But he then asks Meno if *he* can say what virtue is (71d), where it is clear from the subsequent exchanges that a definition is being sought.

Why does Socrates move so quickly from the claim that he has no idea what virtue is to demanding a definition before any further inquiry can be possible? After all, we would probably want to say about many things in the world that we have some idea what they are—we can make a range of true statements about them, for example—without being able to define them. If that is so, then Socrates looks unmotivated in apparently deriving the strong claim that I can know something about an object only if I can define it, from the innocuous claim that if I have no idea what an object is then I cannot know anything about it.

One response might be that Socrates' statement, that he doesn't know "at all" what virtue is, is a rhetorical flourish. What he really means is just that he doesn't have a definition of it, so it is natural that he should then try to elicit one from Meno. There are at least two reasons for resisting this move. First, taking Socrates at his word makes better sense, as we have seen, of his claim that in his present state he cannot know what qualities virtue has. Secondly, Socrates' plight taken at its face value is picked up by Meno and used as the basis for his famous challenge ("Meno's paradox") to the very idea that the sort of enquiry Socrates purports to undertake and encourage in others is possible. Socrates' urging, in the wake of Meno's repeated failures to define virtue, that they continue the attempt to discover what it is leads Meno to ask how they can search for something when they do not know "at all" what it is (80d). The following example may illustrate Meno's thought: imagine I am told to search for an elephant, but I happen not to have any idea at all what an elephant is. There is indeed no intelligible sense in which I could proceed to search for an elephant.

Yet when Socrates reformulates the paradox, he drops the "at all" and asks how it is possible to search for something that one does not know, given that one does not know what one is looking for (80e). The prominence of the "at all" motif, juxtaposed with its absence from Socrates' reformulation, is unlikely to be accidental. Scholars have worried that the paradox is efficacious only if one posits a would-be enquirer who is in a state of utter ignorance about the object of enquiry. If one knows something about it, then surely one has something to go on and enquiry can proceed; and surely that is the situation in most actual cases of enquiry. If I know, for example, that elephants have long trunks, then I can begin to look for something with a long trunk.

Not so fast. I suggest that the dropping of the "at all" in Socrates' reformulation is there precisely to encourage the reader to ask whether the paradox, which is certainly plausible with the phrase included but does not seem to reflect most actual situations, might not still threaten the possibility of enquiry even without the stipulation that the potential enquirer be blankly ignorant of the object.

Consider the following variant of our earlier example. Imagine that an African elephant and an Indian elephant have escaped from my local zoo and that I am asked to search for the former. Let us assume that I know lots of things about African elephants except for those few characteristics that distinguish them from the Indian variety. I step outside my door, and lo and behold there are the two escapees in my spacious driveway! (Let us grant that I can at least take the pair to be the escapees.) Question: can I, even

in this hugely advantageous position, search for the African elephant on the basis of what I know?

The answer is surely not. All I can do is stare dumbly from beast to beast, with no principled way of taking things further. Moreover, in this situation it seems we might well deny that I have knowledge of the African elephant, given that I cannot pick it out from a choice of two, other than by guesswork. Yet by hypothesis I had a plentiful stock of information about it; I was far from ignorant about African elephants.

The conclusion beckons that, in the absence of identificatory knowledge, there really is nothing to sustain enquiry. This, it seems to me, explains why Socrates moves so readily in his initial discussions with Meno from the claim that he does not know what virtue is at all to the demand for a definition. If so, however, we seem to have landed with another paradox, and this forms the second half of Socrates' reformulation at 80e: if I already know what I am looking for, then there is no need to search. If I need to know what, say, virtue is, before I can search for it, then I can certainly look for cases of it (and presumably, armed with the definition, reliably identify them), but enquiry into what virtue is has been rendered otiose.

How exactly Socrates attempts to evade this problem takes us beyond the scope of this chapter and into the *Meno*'s celebrated theory of recollection. My view in brief is that Socrates does accept that definitional knowledge of x is necessary for enquiry into x. The ingenuity of the recollection theory is that it provides a way of explaining the sense in which one can have such knowledge without thereby making the enquiry it was supposed to enable redundant.

There is little that will not be contentious in any reading of Socrates' strategy in the *Meno*. But it is at least relatively uncontroversial to maintain that Socrates thinks enquiry is possible, not to say vital, and that it is to be directed towards defining—or, in terms of the *Meno*, recollecting a definition of—its object. My purpose has been to offer some ways of understanding why, in the *Meno* and elsewhere, the idea of definition has such an important place within Socrates' conception of enquiry.

VII

Let me move on, then, to consider one final aspect of Socratic definition, a principle that is sometimes labeled the "Unity of Definition." This principle is connected with the requirement of exhaustiveness, but they are not quite the same thing. Whereas the exhaustiveness requirement simply demands that a good definition must fit all cases of the thing being defined, the Unity principle concerns the prior question of how broad a category of thing it is appropriate to try to define. If, for example, one is purporting to define courage, then certainly one's definition had better fit all cases of courage. But should one be attempting to cover as broad a category as courage with a single definition in the first place?

Socrates' view seems to be that where one has an over-arching category with various sub-categories then the overarching category is the proper object of definition. We can see this at work if we return to Laches' first definition of courage as standing one's ground in battle. Socrates, as we have seen, objects that one can show courage in retreat as well, citing among other examples the way in which the Spartans fought against the Persians (191b–c). Laches has thus failed to meet the requirement of exhaustiveness. What is notable thus far is that one specific, albeit (at least in the Greek context) absolutely central, category of courage has been under consideration,

namely courage on the battlefield. Socrates' next move is to point out that there are many other arenas in which courage can be displayed—in illness, poverty and politics, for example—and that we need to identify the same quality that is present in all these varieties (191d–e).

It is here that we move from a fairly straightforward application of the requirement of exhaustiveness to the substantive thesis that there is a single property that constitutes courage across all its varieties, and therefore a unitary account to be given of what that property is. The *Laches* opens with a long (to many interpreters puzzlingly long) discussion about whether two young men should undergo training in fighting in armor as part of their education. One reason for its length may be to beguile readers into the idea that it is just the military sphere we are interested in (Laches and Nicias, the two main interlocutors, are in fact both generals), so that Socrates' expansion into other areas will strike us as significant, even surprising. It is only in the wake of the expansion that Socrates is moved to ask Laches whether he understands what is being asked of him with the "What is courage?" question and its demand for a single property; Laches says that he does not, and Socrates then has to offer further explanation before Laches is on board (191e–192b).

One response to Socrates' unitary demand that this exchange may invite would be to deny that there is a single property common to every variety of courage: military, civic, and so on. Obviously we would expect some similarity between them, given that they can all be termed varieties of courage, but Socrates has not, one might argue, given sufficient reason to conclude that the different varieties must exhibit one and the same quality. A more complex response would be not to deny that there is something that all varieties of courage have in common, such that they are indeed all referred to by the same term, but that the proper targets of definition are the individual varieties, not the over-arching category. Such definitions are likely to be richer and more informative; perhaps the definition of the over-arching category is just something that will drop out of a proper accounting of the individual varieties, but it is consideration of the latter that does the load-bearing work in our coming to understand what courage is.

A possible charge against Socrates, then, is that his approach to definition is too top–down. He aims exclusively at defining the overarching category and, while calling our attention to the extent of the varieties, seems to bypass them too quickly and be uninterested in exploring them in their own right. In the *Meno* he makes a similar move. Meno proffers a list of virtues at 74a, but Socrates replies dismissively that they have found many virtues when what they were looking for was the single one that covers them all, as if further investigation of the varieties, rather than the overarching category, would barely be relevant to the discovery of what virtue is.

The issue is complicated by the fact that Socrates is inclined at times to consider, most explicitly in the *Protagoras*, the idea that all the virtues may be reducible to one, a kind of knowledge or wisdom (a thesis generally known as the "Unity of Virtue"). If so, his urging of Meno to put aside the individual virtues and focus on defining virtue as such may have that idea in the background. Yet although Socrates' insistence on the Unity of Definition is presented in the context of his discussions of virtue, he seems to regard the definitional principle as being of quite general application. He uses the examples of speed (in the *Laches*) and shape (in the *Meno*) to illustrate it. So it seems fair to conclude that his advocacy of it is not tied to any special thesis about the relation between virtue and knowledge.

VIII

It is noteworthy that many dialogues generally considered to originate from later in Plato's career show a much greater interest in the laying out and analyzing of varieties within a given category. If Socrates' focus in the *Laches* and *Meno* was on discovering the factor they have in common, a contrasting picture is presented in a late dialogue such as the *Philebus*. There, Socrates' interlocutor Protarchus adopts a hedonistic position, and Socrates' first move is to impress on Protarchus that some kinds of pleasure are very different from others. Strikingly he bids Protarchus not to rely on an argument "that makes all the things that are most opposite one" (13a). This upbraiding of Protarchus for positing the unity of a category at the expense of its diversity sounds remarkably like a criticism of Socrates' approach in the earlier works. Indeed Plato seems to intend it as such, since in the *Philebus* he has Socrates use the examples of colors and shapes to illustrate the diversity of varieties within a given category (12e–13a), whereas in the *Meno* Socrates used those same examples to encourage Meno to look for the unifying element (73e–75a).

The emphasis on giving varieties their due is a feature of several of Plato's later works, among which one might number the *Phaedrus*, *Sophist* and *Statesman* as well as the *Philebus*. Socrates and other speakers sometimes express this by talking of "dividing" some category into its constituents, and they call the art responsible for undertaking such division "dialectic" (*Phaedrus* 266b–c, *Sophist* 253d, *Statesman* 286d–287a, *Philebus* 17a). This label has a somewhat versatile history in the Platonic corpus, tending to be affixed to whatever method of philosophical enquiry is promulgated at a given time, but it acquires a distinctive character here. Following terminology used by Socrates at *Phaedrus* 266b scholars have correspondingly identified a method present in some of the later works known as "Collection and Division" encompassing the interest both in identifying an overall category and in more careful classification within it. I cannot do justice here to the complexities thrown up by this methodological shift, but I should like to end with some brief remarks on how we might see the relation between Plato and his character Socrates in the light of these developments.

They offer, firstly, another case in which Plato uses his chosen format to maintain a critical distance from Socrates. The device of inter-textual reference, highlighted in the apparent allusion by the *Philebus* to the *Meno*, allows the reader to notice a contrast between Socrates' approach to definition in the two works. There is reason to think that Plato may be hinting that the historical Socrates emphasized unity in definition over diversity. This seems clear in the two dialogues—the *Sophist* and *Statesman*—in which division features heavily, but in which Socrates is not the leading figure, although he is present in both, and in a position to absorb methodological lessons from their protagonist, the Eleatic Stranger.

The Stranger in turn, as if to put some distance between Socrates and himself, describes a practitioner of an adversarial method of refutation, surely intended to put us in mind of Socrates, as embodying a kind of sophistry, albeit a "noble" one (*Sophist* 230b–231b). In the *Philebus* Socrates describes the method he advocates there as given by the gods or seized from heaven by some Promethean figure (16c), which while disavowing origination with himself (in the *Apology* it was not the method but the instruction to practice it that was given divine origin) may also carry with it an inter-textual reference to the Stranger, who at the opening of the *Sophist* Socrates speculates must be "some god" (216a–b).

Now, critical distance from Socrates does not necessarily amount to Platonic criticism of Socrates. It is, after all, Socrates himself who lambasts Protarchus for his exclusive focus on unity. If, as I have argued, that amounts to a criticism of Socrates' own position in other works, then it would more properly be described as self-criticism. Moreover, one can exaggerate the extent of the criticism. In the *Philebus*, Socrates still seems to be working within a top-down framework: we must seek and discover the single form, he says at 16c–d, and then consider the number of its species. A similar order is envisaged in the *Phaedrus*: first define the form, then divide it into species (265d–266b, 277b). If this is right, Socrates seems to be addressing a deficiency in his outlook, not radically restructuring it.

It is an intriguing question whether the method practiced in the *Sophist* and *Statesman*, where Socrates is not the protagonist, goes further. Both works present definitions of a given species in terms of its location within a hierarchical tree of broader species. To give a slightly simplified version of an example from the *Statesman*, weaving is defined as that part of the combining part of wool-working that is concerned with intertwining (283a). Arguably, this method gives primacy to the narrower category ("weaving") over the broader ("combining" or "wool-working"), since it does not seem to make defining the broader species a condition for having defined the narrower, even though this is a requirement implicit in Socrates' complaint in the *Theaetetus* (the dramatic predecessor to the *Sophist* and *Statesman*, but with Socrates still at the helm) about Theaetetus' enumeration of varieties of knowledge in response to the request to say what knowledge is (146c–147c). If so, we have what looks like a significant departure regarding the approach to definition in the dialogues led by the Stranger from anything that Socrates himself advocates.

There is plenty of room for disagreement here. For example, it might be argued that, as far back as the *Gorgias*, Socrates has been perfectly at ease defining a species by reference to its place in a hierarchy of broader species, since in that dialogue he identifies rhetoric as a branch of that part of flattery concerned with gratifying the soul (465b–466a). Whether this is an approach to definition that Socrates ever reflectively endorses is, I think, another question. Even here the over-arching species ("flattery") is, if not defined, at least substantively characterized (464c–d) before Socrates moves on to its sub-species. The top down approach still seems to be in the driving seat here.

Whatever view one takes of these cases, Plato's challenging use of inter-textuality and the dialogue form serves to engage the reader in the debate. By setting out different approaches to the pursuit of definition without telling us which (if any) is correct, and by indicating ways for us to compare and contrast them, the author encourages us to think through the questions for ourselves and see the process of enquiry as ongoing. In his treatment of philosophical method Plato could pay no better tribute to Socrates, or to his topic, than that.

References and further reading

There is a huge volume of literature on philosophical method in Plato. The following is a very brief selection of further reading on some of the main topics discussed in the chapter.

Two classic articles on Socrates' method of *elenchus*, which sparked much of the later scholarly debate are:
G. Vlastos (1983), "The Socratic Elenchus," *Oxford Studies in Ancient* Philosophy 1: 27–58.
G. Vlastos (1985), "Socrates' Disavowal of Knowledge," *Philosophical Quarterly* 35: 1–31.

Revised versions of both articles can be found as Chapters 1 and 2 respectively of:

G. Vlastos (1994), *Socratic Studies*, Cambridge: Cambridge University Press.

For some further views on the aims and methods of Socratic enquiry see:

Frede, M. (1992), "Plato's Arguments and the Dialogue Form," *Oxford Studies in Ancient Philosophy*, Supplementary Volume: 201–220.
Benson, H. (2011), "Socratic Method," in D. Morrison (ed.) *The Cambridge Companion to Socrates*, (2011), Cambridge: Cambridge University Press: 179–200.
Brickhouse, T. and Smith, N. (1994), *Plato's Socrates*, Oxford: Oxford University Press.
Kahn, C. (1996), *Plato and the Socratic Dialogue*, Cambridge: Cambridge University Press.

A collection of essays that discusses whether we should speak of "a" Socratic method is:

Scott, G. ed. (2002), *Does Socrates Have a Method? Rethinking the Elenchus in Plato's Dialogues and Beyond*, University Park: The Pennsylvania State University Press

On enquiry in the *Meno* and Meno's paradox, see:

Fine, G. (1992), "Inquiry in the Meno," in R. Kraut (ed.) *The Cambridge Companion to Plato*, Cambridge: Cambridge University Press: 200–226, reprinted as Ch.2 of her *Plato on Knowledge and Forms* (2003), Oxford: Oxford University Press
Scott, D. (2006), *Plato's Meno*, Cambridge: Cambridge University Press.

On philosophical method in some of Plato's later dialogues, see:

Brown, L. (2010), "Definition and Division in Plato's *Sophist*," in D. Charles, ed. *Definition in Greek Philosophy* (2010), Oxford: Oxford University Press: 151–71
Gill, M. L. (2010), "Division and Definition in Plato's *Sophist* and *Statesman*," in D. Charles, (ed.) *Definition in Greek Philosophy* (2010), Oxford: Oxford University Press: 172–99

See also:

Benson, H. (2009), "Collection and Division in the *Philebus*," in J. Dillon, J. and L. Brisson (eds.) *Proceedings of the VIII Symposium of the International Plato Society on the Philebus*, Sankt Augustin: Academia: 19–24.
Lane, M. (1998), *Method and Politics in Plato's Statesman*, Cambridge: Cambridge University Press.
Sayre, K. (2006), *Method and Metaphysics in Plato's Statesman*, Cambridge: Cambridge University Press.
Wedin, M. (1987), "Collection and Division in the *Phaedrus* and *Statesman*," *Revue de Philosophie ancienne* 5: 207–33.

Related chapters

8. Socrates: sources and interpretations
9. Reading Plato
11. Plato's epistemology
20. Understanding, knowledge, and inquiry in Aristotle

11
PLATO'S EPISTEMOLOGY

David Wolfsdorf

Introduction

Knowledge is a central topic in Plato's dialogues. The reason for this is ethical. Plato thinks that the pursuit of a good life requires the pursuit of knowledge. The reasons for that are diverse. For example, in many dialogues, Plato has his main and favored character Socrates argue in various ways that knowledge constitutes human goodness. Elsewhere, for example, in *Philebus*, he has Socrates argue for the weaker thesis that knowledge is not the sole, but is nonetheless the most important, constituent of the good life for humans. It does not seem that knowledge of any and every kind is required for human goodness or the good life. Consider, for example, knowledge of pottery or of shoemaking, let alone knowledge of how many teeth Ctesippus has or of how many grains of sand there are on beaches at Sounion. Rather, as Socrates sometimes puts it, what is required is knowledge of goodness.

The concept of the knowledge of goodness itself raises various questions. Above all, what is it? Also, is there not a logical problem with the idea that knowledge of goodness constitutes human goodness? Plato is aware of these questions. But the examination of the claims that lead to these questions and the answers to the questions themselves largely fall within the domain of ethics, not epistemology.

Plato's dialogues engage various epistemological questions. For example, how is knowledge acquired? Does knowledge have particular objects? How are various forms of knowledge to be distinguished? Arguably, the most basic epistemological question and the one upon whose answer the answers to these and other epistemological questions depend is "What is knowledge?" This is the question on which the present discussion focuses. More specifically, my aim here will be to guide the reader into what I regard as *the core interpretive difficulty* to which pursuit of this question leads.

Various dialogues engage with the question "What is knowledge?" in different ways. Some do so directly, some obliquely. Some present sustained examinations; some discuss the question briefly. Some offer positive results; some end in aporia: puzzlement or a recognition that the discussants simply do not know the right answer. The following sections focus on Plato's treatments of knowledge in three dialogues: *Meno*, *Theaetetus*, and *Republic*. In each case, Plato has Socrates develop some distinction between knowledge and belief. The treatments in *Meno* and *Theaetetus* are closely related. I discuss their relations and suggest how the discussion in *Theaetetus* supersedes the discussion in *Meno* in certain respects, even while the *Theaetetus* discussion ends in aporia. Discussions in *Republic*, in particular in *Republic* Book 5, but also *Republic* Books 6 and 7, appear to stand in sharp contrast to the *Meno* and *Thea-*

etetus treatments. In *Meno* and *Theaetetus*, knowledge is explained as a kind of belief, namely, true belief with some additional component. In *Republic* 5, 6, and 7 knowledge and belief appear to be treated as exclusive. The core interpretive difficulty is whether the treatments of knowledge in these passages of *Republic* can be squared with those in *Meno* and *Theaetetus*.

In addressing the core interpretive difficulty, it must be considered whether there is a single conception of knowledge on offer. In particular, in some contexts Plato seems to have propositional knowledge in mind: that is, knowledge of a single proposition, for example, knowledge that the area of a square *S*, whose side is equal to the hypotenuse of a square *T*, is double the area of *T*. In other contexts, he seems to have in mind knowledge as a field or body of information. For example, in *Charmides*, when Socrates' interlocutor Critias claims that sound-mindedness is knowledge, Socrates inquires into this knowledge as though it were analogous to geometry or medicine or architecture. More generally, throughout the dialogues widely regarded as early, Socrates tends to pursue an understanding of the knowledge that constitutes human goodness by analogy with specialized bodies of knowledge such as medicine, architecture, and geometry. Finally, in some contexts, it is unclear whether Plato's discussion of knowledge corresponds with any familiar sense of knowledge we have. Arguably, Plato then uses the word "knowledge" as a term of art or in an idiosyncratic way.

Meno

According to what is known as The Standard Analysis in contemporary epistemology, propositional knowledge is standardly analyzed as a kind of justified true belief. If one knows some proposition *p*, then: one believes that *p*; *p* is true, and one has some sort of justification for *p*. For example, I know that the rumbling sound outside my office window is due to a construction worker using a jackhammer to break up the concrete walkway that leads to my building. I know this because I believe it; it is true; and I have justification for my belief. My justification is that I saw the construction worker jackhammering the walkway when I arrived this morning and heard the loud rumbling coming from his work.

Plato is often taken to have apprehended this idea or something akin to it, for in *Meno* Socrates distinguishes knowledge from true belief. He claims that knowledge is true belief with "a reasoning of the *aitia*" (98a3–4). It is questionable, however, whether justification and a reasoning of the *aitia* are equivalent. "*Aitia*" is often translated as "cause," although this is unsatisfactory. Strictly speaking, a cause is but one kind of *aitia*. An *aitia* is an entity that is responsible for another entity's being as it is; it may be responsible in any number of ways: materially, logically, causally, teleologically. Consider the following questions: Why does water at sea level boil at 100 degrees? Why does a triangle have 180 degrees? Why is the thermometer reading minus 50 degrees? And why is there cause for concern that my temperature is now 94 degrees? Accordingly, a reasoning of the *aitia*, or what I will call "aetiological reasoning," answers the vague question: "Why is such-and-such the case?" This appears to be a request for an explanation. An explanation of some proposition clarifies or illuminates that proposition in some way. In contrast, justification provides reason to believe a proposition. Justification needn't provide any explanation. For example, that some proposition *p* been expressed by a divine oracle provides justification for believing that *p*, but it doesn't explain *p* itself.

Further reason to think that Plato understood the request for an *aitia* to be a request for an explanation derives from Socrates' discussion of aetiology in *Phaedo* (96a5–107a1). There Socrates describes his early intellectual pursuits in natural philosophy: "I thought it was an extraordinary thing to know the *aitiai* (plural of *aitia*) of each thing: why it comes to be, why it perishes, and why it exists" (96a7–9). Socrates focuses on the *aitiai* of nourishment and growth, cognition and perception. He wonders whether heat and cold are responsible for nourishment and growth, and whether the brain is the bodily organ responsible for perception. Note that, as in the present case, the *aitiai* Socrates tends to cite in his discussions are objects rather than propositions, states of affairs, or events. But insofar as *aitiai* are explanatory, they must figure in propositions. Thus, when Socrates makes claims of the form "*x* is the *aitia* of *y*," this must be taken to be elliptical. For example, in the case of heat and cold, Socrates' question may be put less elliptically as follows: Are heat and cold decomposing and reconstituting foodstuffs responsible for the nourishment and growth that occur in animals? In that case, we might more precisely refer to heat and cold and the like as explanatory or aetiological factors.

Understanding entails explanation. That is, when one understands some proposition, one can explain that proposition. Merely knowing something does not entail explanation. Consider an example of a divine oracle drawn from Plato's *Apology*. The Delphic Oracle reported that Socrates was the wisest of the Greeks. Assuming the Oracle tells the truth, its pronouncement provides Socrates with knowledge, for the oracle provides Socrates with justification for believing that he is the wisest of the Greeks. On the other hand, Socrates can't understand the oracle. On the contrary, he is initially completely baffled by the claim, for he doesn't take himself to be wise at all.

Since aetiological reasoning is explanatory, arguably Plato's conception of knowledge should be construed as understanding rather than as propositional knowledge. On the other hand, the capacity to explain something may provide justification for believing the relevant content. Support for this suggestion derives from consideration of the way Socrates introduces the distinction between knowledge and true belief in *Meno*. Socrates claims that true belief is a fine possession so long as it abides, but that it tends to be unstable until it is bound with aetiological reasoning. He then claims that aetiological reasoning is recollection (*anamnēsis*) (98a4).

In identifying aetiological reasoning with recollection, Socrates is referring to an earlier discussion in the dialogue, which was prompted by Socrates' thesis that all learning is recollection (82b9–86b5). According to this thesis, prior to incarnation the soul acquired knowledge of a range of contents (not clearly specified in this or any other dialogue in which the theory of recollection in discussed). After the acquisition of this knowledge and prior to or precisely at the moment of incarnation, these contents were lost to consciousness and became latent in the soul. Learning is a process of recovering and thus recollecting the latent contents. Recollection is an important epistemological theory in its own right. It is also a highly controversial theory. Indeed, I find it hard to avoid the verdict that the theory incurs much heavier epistemological burdens than those it is introduced to solve. I will not attempt here to justify or even to explain Plato's position. I have introduced the theory simply because Socrates' demonstration of learning as recollection provides us an example of aetiological reasoning.

Socrates offers Meno a demonstration of learning as recollection using Meno's slave. Socrates presents a geometrical problem to the slave, who begins the conversation ignorant of geometry. The problem is to construct a square *S* double the area of a square *T* with side 2. The slave first pursues two false avenues: the construction of a square with

side 4 and the construction of a square with side 3. Finally, the slave arrives at the correct conclusion that the side of *S* must equal the hypotenuse of *T*. Socrates does not claim that the slave has now acquired knowledge; rather, he says that the slave is well on his way. In other words, the slave has true belief, but as yet an inadequate grasp of why his conclusion is true. So the example demonstrates recollection in progress rather than fully achieved.

Through the conversation, Socrates guides the slave by asking him what appear to be leading questions. Indeed, one might object that the slave could not have achieved the correct answer without Socrates' help; and since, presumably, Socrates begins with explicit knowledge of the correct solution, the slave is in fact acquiring explicit knowledge not from himself, but from Socrates. But Socrates insists that throughout the exchange all the slave's answers have been "his own (*heautou*)" (85c1). By this Socrates means that the slave has not simply been obediently and blindly led by Socrates, but has been thinking through the implications of each question and responding on the basis of his considered judgment. In fact, Socrates allows the slave to pursue the two false avenues precisely to ensure that the slave thinks for himself and does not assume that Socrates will lead him to the answer. Throughout the exchange, then, the slave increasingly gains insight into the logical relations between various geometrical objects relevant to the solution to the problem. In short, he increasingly comes to see for himself how the geometrical figures and their components are related and thus why the side of *S* must equal the hypotenuse of *T*.

In short, aetiological reasoning here consists of the reasons that clarify and corroborate the slave's thesis that the side of *S* equals the hypotenuse of *T*. This suggests that knowledge requires comprehension of why the content that is truly believed is true. At least in this case, however, such comprehension also justifies one's belief in the truth of the content. As I said, the reasons both clarify and corroborate the slave's thesis. Thus, although explanation and justification need not overlap, they can. Here, the kind of justification that explanation affords is what contemporary epistemologists call "internalist." "Internalist justification" means that the justification is directly available to the subject. Thus, knowledge as true belief with aetiological reasoning may be a kind of propositional knowledge after all. We may call this kind of propositional knowledge "explanatory knowledge." In contrast to mere propositional knowledge, explanatory knowledge entails understanding and thus explanation.

Theaetetus

In *Theaetetus*, Socrates also distinguishes knowledge from true belief. But the dialogue contains no theory of recollection, and Socrates does not speak of aetiological reasoning. Instead, Socrates examines the thesis that knowledge is true belief with an "account (*logos*)" (201c8–d1). I assume that true belief with aetiological reasoning is equivalent to true belief with an account. As we will see, however, the kind of account Socrates actually examines in *Theaetetus* is but one kind of aetiological reasoning. More precisely, Socrates examines and criticizes two serious candidates for the form of account that knowledge requires: decompositional (201d8–206c6 and 206e6–208c3) and differential (208c4–210b3).

A decompositional account characterizes some entity *x* in terms of *x*'s elements. Socrates illustrates this form of an account with the letters constituting a word. The elementary constituents of the name "Theaetetus" are the letters "t," "h," "e," and so on. Thus,

an account of the name "Theaetetus" requires an enumeration of the letters constituting the name. In other words, a decompositional account is a reductionist account of some kind. In contrast, a differential account characterizes *x* as distinct from everything else. That is, a differential account is a sort of uniquely specifying description. Socrates illustrates this conception with an example that assumes a geocentric conception of the universe: the sun is the brightest celestial body moving around the earth.

Granted this, how are such accounts supposed to supplement true beliefs to yield knowledge? The most salient kind of belief featured in the course of the discussion in *Theaetetus* is recognitional or identificational. By a "recognitional or identificational belief" is meant a belief that identifies some object as such-and-such, for example, the belief that that man is Chrysippus or that that celestial body is the moon. Assume that the beliefs in question here are of this kind; for example, "this is Theaetetus' name," said of some inscription, and "that is the sun," said of some celestial object. Accordingly, in order to have knowledge that something is *x*, one must have an account of *x*. For convenience, let us call this an "identificational account." Assume that an identificational account is a form of aetiological reasoning. In that case, *Theaetetus*' examination of an identificational account can be seen to supersede *Meno*'s treatment of aetiological reasoning. In *Meno* there is no discussion of the form that aetiological reasoning should take. But in *Theaetetus* Socrates examines the form that identificational accounts, and thus the form that one kind of aetiological reasoning, should take.

The treatment of identificational accounts in *Theaetetus* also seems to supersede the treatment of aetiological reasoning in *Meno* in the following way. In *Meno* Socrates does not consider the epistemological status of the aetiological account itself. That is, he does not consider whether the reasons that support and explain Meno's slave's conclusion regarding the doubling of the square are themselves adequately clear or adequately grounded. In contrast, in *Theaetetus* he criticizes decompositional and differential accounts on epistemological grounds.

Socrates rejects the decompositional conception of an account for two reasons. One is that it applies to compounds, but not to elements themselves. If elements cannot be accounted for, they cannot be objects of knowledge. This is taken to be especially paradoxical since, according to the thesis under consideration, some sort of cognition of elements is fundamental for all knowledge. Let us call this the "problem of elemental knowledge." The second reason is that it seems possible to have true belief that certain elements constitute a compound, but to lack knowledge of those elements as constitutive of the compound. Socrates offers the following example: a child could learn to spell his name, but lack understanding of why it was so spelled. In other words, an individual could have some sort of cognitive grasp that certain elements constitute an entity, but not have, in some intuitively compelling sense, the right sort or an adequate sort of cognitive grasp. For example, the child grasps by rote that these letters spell his name, but he does not possess more general principles of spelling. So in this case, a decompositional account seems inadequate when conjoined with true belief to yield knowledge.

Socrates offers a differential conception of an account, at least partly, to overcome the problem of elemental knowledge. Again, a differential account explains *x*, not in terms of its constituents, but in contrast to everything else. Thus, whereas decompositional accounts reach a dead-end in the face of elements, elements may be explicable differentially. But Socrates criticizes a differential account as well. One criticism he makes concerns the epistemological status of the differential account itself. Is one's grasp of the differential account doxastic; that is, is its cognitive status that of belief

(*doxa* in Greek)? Or is it epistemic? If doxastic, then how can this yield knowledge? If epistemic, then the definition of knowledge as true belief with a differential account is circular. It is circular because it claims that knowledge is true belief with a differential account that is known.

The discussion in *Theaetetus* concludes without resolving the epistemological problems of an account or of what form accounts should take. Indeed, the dialogue's central objective of defining what knowledge is ends in aporia. One needn't, however—and my preceding comments indicate that I myself do not—interpret the aporetic conclusion as an indication that Plato relinquished the view that knowledge is true belief with an account or that the account that knowledge requires is aetiological. Possibly, the aporetic conclusion indicates just that Plato thought himself unable to offer a satisfactory account of what sort of account knowledge itself requires. Alternatively, perhaps Plato thought he did have a satisfactory account to offer, but for pedagogical or other reasons, he wished not to offer it. In other words, it is unclear whether the aporetic conclusion of *Theaetetus* is to be explained on epistemological or on some other grounds.

Republic 5

At *Republic* 5, 474b4–480a13, Socrates develops a discussion whose objective is to define what a philosopher is. In the course of the discussion, Socrates distinguishes the philosopher from the sight-lover and sound-lover. I will refer to the latter two conjointly as "the perception-lover." The perception-lover is a sort of aesthete; he runs from dramatic spectacle to dramatic spectacle, loving their sights and sounds. In contrast, the philosopher is, as Socrates says, a lover of truth. The ensuing discussion works to clarify what this means. In the process, Socrates' distinction of the philosopher from the perception-lover develops through a distinction between knowledge and belief. Socrates argues that the philosopher possesses knowledge, whereas the perception-lover merely possesses belief.

Beyond some preliminary moves, the discussion is divisible into two parts: 475e6–476e3 and 474e4–480a13. The first part is directed toward Socrates' interlocutor Glaucon, the second toward a hypothetical perception-lover. This split between audiences is significant because Glaucon himself is a philosopher, and so is understood to have conceptual resources on which Socrates can draw in making his case. The perception-lover lacks these resources, so Socrates must persuade the perception-lover in a different way. (I note that the question of why Plato has Socrates pursue the discussion on both of these fronts is itself an important one, but I will not examine it here.)

In particular, Glaucon grasps the metaphysical distinction between Forms and participants. By "participants" is meant the perceptual entities that participate in Forms. The perception-lover does not grasp this metaphysical distinction. Socrates explains to Glaucon that the perception-lover's cognitive capacity is limited to the apprehension of perceptual participants. Since perceptual participants are ontologically dependent on Forms, the perception-lover's grasp of reality is limited. Socrates describes him as living in a dream state. In particular, Socrates conveys the point in speaking of the distinction between the Form, Beauty, and the perceptual entities that participate in the Form. The perception-lover misidentifies beauty with the numerous and various perceptual participants rather than the single Form, in virtue of which the participants are beautiful. So the perception-lover's conception of beauty is disjoint, not unified:

> "What about someone who recognizes beautiful things (that is, beautiful perceptual entities), but does not recognize beauty itself (that is, the Form Beauty) and is unable to follow someone who leads him to knowledge of it. Does it seem to you that he is living in a dream or in a waking state? Consider this. Isn't the condition of dreaming when someone, whether in fact in a dream or awake, thinks that that which is similar (in this case, some perceptual entity that participates in the Form Beauty) is not similar to something, but is the same as that (the Form Beauty) which it resembles? … But someone (namely, the philosopher) who on the contrary thinks that the beautiful itself (the Form Beauty) is something and is able to behold both it and the things that participate in it and does not think that the participants are it or that it is the participants, does it seem to you that this person is dreaming or awake? … Then we would rightly say that his mind is the mind of one who knows, since he has knowledge, whereas the mind of the other is the mind of one who believes, since he has belief."
>
> (476c2–d6)

It is puzzling that Socrates identifies the state of mind of the philosopher with knowledge, and that of the perception-lover with belief. It is not as if the perception-lover merely believes that beauty is identical to the various perceptual entities, whereas the philosopher knows it. Rather the perception-lover falsely believes that beauty is identical to the perceptual entities, whereas the philosopher knows that it is not. I will propose a solution to this problem below, once I have discussed Socrates' argument with the perception-lover.

Socrates begins his argument with the perception-lover not with a distinction between knowledge and belief, but with a distinction between knowledge and ignorance. We will have to clarify why Socrates begins this way. Presently, Socrates claims that knowledge is set over (*epi*) what is (*to on*), whereas ignorance is set over what is not. It is questionable what Socrates means by "set over," and it is controversial what he means by "what is (*to on*)" and "what is not."

Let's begin with the phrase "set over." A bit further into the argument, Socrates does introduce belief. He says that knowledge and belief are different powers or capacities. (I will use the terms "power" and "capacity" interchangeably.) In clarifying what he means by a capacity or power (*dunamis*), Socrates claims that distinct capacities are set over (*epi*) distinct kinds of thing and that they enable distinct functions with respect to those kinds. For convenience, I will refer to that over which a capacity is set as its *relatum* (plural: *relata*). Socrates illustrates his claims about capacities using examples appropriate to the perception-lover: sight and hearing. The functions of the capacities of sight and hearing are the acts of seeing and hearing. The Greek phrase "*eph' <einai>*" corresponding to the English "set over" has the sense of "having power over." Socrates does not explicitly state what the *relata* of sight and hearing are, but it seems reasonable to infer that since the capacity to hear has power with respect to audible properties, but none with respect to visible ones, the *relata* of hearing are audible properties, whereas the *relata* of sight are visible properties.

Correspondingly, Socrates claims that knowledge and belief are distinct powers. Like sight and hearing, they are distinguished by what they are "set over" and by correlatively distinct functions. (Note that Socrates does not speak of ignorance as a power. This makes sense, for ignorance is precisely a lack of power.) Given that knowledge

is set over what is, while ignorance is set over what is not, insofar as belief is a distinct capacity, it cannot be set over either what is or what is not. Moreover, insofar as belief is, as Socrates puts it, "clearer" (*phanoteron*) than ignorance, but more "obscure" (*skotōdesteron*) than knowledge, belief must be set over what is between what is and what is not. In light of this, we can now clarify why Socrates begins his argument with the perception-lover by drawing a distinction between knowledge and ignorance rather than between knowledge and belief. Socrates intends to clarify the nature of belief and its *relatum* as situated between the extremes of knowledge and ignorance and their *relata*. Socrates conveys as much in the following passage:

> It only remains for us to find that which participates in both what is and what is not and which cannot correctly be called purely one or the other, in order that, if there is such a thing, we can rightly call it the *relatum* of belief, thereby setting extremes over extremes and intermediates over intermediates.
>
> (478e1–5)

Given this, let us now attempt to clarify the meaning of the phrases "what is" and "what is between what is and what is not." Commentators typically distinguish three interpretations of the phrase "what is": (predicative) what is *f*, where "*f*" stands for some predicate, for example, what is beautiful; (existential) what exists; and (veridical) what is true. The veridical interpretation best conforms to the distinction between knowledge and belief in *Meno* and *Theaetetus*. According to this interpretation, knowledge is set over what is true, while belief is set over what is both true and false. The latter claim is taken to mean that belief can be either true or false. This interpretation is therefore taken to be consistent with the view that knowledge is a kind of belief, namely, a kind of true belief.

There are problems with the veridical interpretation. One problem is that the phrase "what both is (true) and is not (true)" more naturally suggests something that simultaneously has both truth and falsity. Beliefs are not simultaneously true and false, however. The phrase "what either is (true) or is not (true)" would be more appropriate. We might try to shrug off this difficulty by claiming that Socrates has merely expressed the point he intends in a somewhat obscure or misleading way. While Socrates uses the phrase "what both is and is not" in the course of the argument, however, he actually prefers the phrase "what is between what is and is not." Consequently, when he says "what both is and is not," we ought to understand him to mean "what is between what is and is not." This way of taking the phrase is, moreover, consistent with Socrates' claim that belief is clearer than ignorance, but more obscure than knowledge. But granted this, there is no property, specifically no truth-value that is between truth and falsity such that belief has that truth-value.

One further and decisive reason against the veridical interpretation is that in his argument Socrates explicitly says that "what is between what is and what is not" is "what is no more *f* than the contrary of *f*," for example, what is no more beautiful than ugly. This suggests that the predicative interpretation is correct. More precisely, it supports the view that by "what is" Socrates means "what is wholly or purely *f*." Recall, in this light, Socrates' claim above that what is between what is and what is not "cannot correctly be called purely one or the other."

Now, according to Platonic metaphysics the Form *F*, where "*F*" stands for a general term, for example beauty, is purely *f*. In contrast, participants are not purely *f* or the

contrary of *f*. For example, the Form Beauty is purely beautiful, whereas some perceptual entity that is beautiful is not purely beautiful. Granted this, however, Socrates cannot appeal to the distinction between Forms and participants in his argument with the perception-lover since, as we have said, the perception-lover does not recognize this metaphysical distinction. Instead, Socrates has to persuade the perception-lover that the many perceptual entities the perception-lover regards as beautiful are in fact not purely beautiful:

> Now that these points have been established, I want to address a question to our friend who doesn't acknowledge the beautiful itself or any Form of the beautiful itself that remains always the same in all respects, but who does recognize the many beautiful things … Will the many beautiful things also appear ugly? Will the many just things also appear unjust? Will the many impious things also appear impious?
>
> (478e7–479a8)

The perception-lover immediately admits that the many beautiful perceptual entities also appear ugly; the many just things unjust; and the many pious things impious. It is surprising, to say the least, that the perception-lover admits these claims so readily, for Socrates does not give him any explicit reasons to admit them. This is especially remarkable in view of how crucial this point in the argument is. How are we to explain the fact that Plato composes the argument so that it moves so swiftly here to the perception-lover's admission?

I suspect that Plato does not make Socrates dwell on this move in the argument precisely because it is such a central feature of Socrates' discussions with non-philosophers in many of the definitional dialogues which are widely regarded as early, including Book 1 of *Republic* where Socrates pursues the question "What is justice?" For example, Cephalus initially defines justice as returning borrowed items. But Socrates refutes this definition on the grounds that if the lender had lent weapons and subsequently gone insane, it would be unjust to return the borrowed items. Thus, returning borrowed items is not purely just. Again, consider the way in *Hippias Major* Socrates engages Hippias in the question "What is beauty?" When Socrates asks Hippias what beauty is, Hippias initially refers to a specific perceptual entity, a maiden. Socrates responds that a maiden may be beautiful in comparison to a monkey, but that she is ugly in comparison to a goddess. In his second attempt to answer Socrates' question, Hippias cites another kind of perceptual entity. He says that gold is beautiful. Again, Socrates responds that in some contexts gold is not beautiful. For example—my example, not Plato's—in some contexts gold is garish. Apparently, then, Plato's reason for compressing Socrates' argument with the perception-lover at this crucial point in the *Republic* 5 argument is that Socrates has familiar resources for gaining the perception-lover's admission to the claims that perceptual *f*s are not purely *f* or no more *f* than the contrary of *f* or both *f* and the contrary of *f*, as Socrates variously puts the point.

Such discussions from *Hippias Major* and elsewhere suggest that in *Republic* 5 by "being purely *f*" Socrates understands "being *f* in every respect and not being the contrary of *f* in any respect." Indeed, recall once again Socrates' statement from the passage above: "the Form of the beautiful itself … remains always the same in all respects." Socrates thinks that no perceptual entity can satisfy this description. Granted this, note that in the context of his argument with the perception-lover, Socrates needn't gain the

perception-lover's admission that Forms exist or that it is they, of all entities, that satisfy the description of being purely *f*. All Socrates needs is the perception-lover's admission that the perceptual entities that he thought were *f* are not in fact purely *f*. Given that, Socrates can conclude that belief is set over these perceptual entities; and from this it follows that the perception-lover possesses belief, not knowledge.

Turning away now from the perception-lover—since knowledge is set over what is, since what *is* is what is purely *f*, and since Forms satisfy the condition of being purely *f*, knowledge is set over Forms. Since the philosopher possesses knowledge, the philosopher possesses knowledge of Forms. When at the beginning of the *Republic* 5 discussion Socrates says that the philosopher is a lover of truth, he is using "truth" in an ontological sense. That is, he is using "truth" as synonymous with "reality." The Forms are the truth in the sense that they are the fundamental constituents of reality. They are the immutable grounds and the metaphysical *aitiai* responsible for everything else being what it is, for everything else is what it is because it participates in the Forms.

The preceding account of the discussion in *Republic* 5 raises many questions. A number of these pertain to the metaphysics of Forms and participants. For example, how is it possible and what does it mean for a Form *F* to be purely *f*? Likewise, the idea that participants are not purely *f* needs clarification and defense. Such questions, however, belong to the sphere of Platonic metaphysics, not epistemology. The basic epistemological question that the *Republic* 5 discussion raises and what I regard as the core interpretive difficulty for the examination of the question "What is Plato's conception of knowledge?" is how to understand the distinction between knowledge and belief relative to the distinctions in *Meno* and *Theaetetus*, as well as relative to anything that we can reasonably understand to be knowledge and belief. If there is no way of understanding the *Republic* 5 distinction between knowledge and belief in terms of familiar intuitions we have about knowledge and belief, then we must take Plato to be introducing terms of art or simply to be employing the terms in an idiosyncratic way. If we do reach that conclusion, however, then we need to provide justification or explanation for why Plato does that.

Knowledge as a capacity and a field

There is some reason to think that in *Republic* 5 Plato uses the terms "knowledge" and "belief" idiosyncratically or as terms of art. In considering these reasons, I draw on some passages from *Republic* 6 and 7. In *Republic* 6 Socrates introduces his celebrated image of the Divided Line (509d1–511e5) to illustrate a hierarchy of cognitive states. Socrates divides a line into two segments; each segment represents a distinct kind of object of cognition, perceptual and intellectual respectively. Socrates then labels the segments according to correlative forms of cognition. The perceptual segment is called "belief"; the intellectual segment "knowledge." Socrates thus appears to use "belief" and "knowledge," as he did in *Republic* 5, to refer to cognitive capacities with distinct *relata*.

Socrates subsequently divides each segment of the line into two sub-segments and associates each of the four resulting sub-segments with a distinct cognitive capacity and correlative kind of *relatum*. The perceptual sub-segments of belief are called "conjecture (*eikasia*)" and "confidence (*pistis*)"; the intellectual sub-segments of knowledge are called "thought (*dianoia*)" and "intelligence (*noēsis*)." The cognitive *relata* of conjecture are natural and artificial copies, imitations, or reflections of perceptual originals; those of confidence are the perceptual originals; those of thought are mathematical objects; and

those of intelligence are Forms. While the terms "conjecture," "confidence," "thought," and "intelligence" are appropriately chosen to the extent that they are applied to forms of cognition of lesser and greater power—as indeed "knowledge" and "belief" were—there is no reason to think that Plato believes that, say, "conjecture" or "*eikasia*" means "a cognitive capacity whose *relata* are limited to perceptual copies or imitations." As such, Plato's choice of terms is at least to some extent a convenient referential device. This supports the suggestion that Plato has Socrates use "belief" and "knowledge" in *Republic* 5 in a similar way.

In *Republic* 7, Socrates discusses mathematics and distinguishes it from dialectic (*dialektikē*). Dialectic is an intellectual practice whose objective is the acquisition of knowledge of Forms. Thus, dialectic relates to intelligence (*noēsis*) as distinguished in the Divided Line. In Book 7, however, Socrates suggests that it was misleading of him, in the discussion of the Divided Line in Book 6, to have identified mathematics with knowledge. Recall that the *relata* of thought (*dianoia*), a sub-segment of knowledge on the Divided Line, are mathematical objects:

> [These mathematical fields] we have often, through force of habit, spoken of as kinds of knowledge, but we need another term, brighter than belief, but darker than knowledge. Previously, we defined it as thought. Yet I don't think we should dispute over a word.
>
> (533d4–e1)

Compare this with Socrates' claim in *Republic* 5 that belief is clearer than ignorance, but more obscure than knowledge. Note also Socrates' nonchalant attitude toward terminology. This further supports the suggestion that Plato's choice of cognitive terms in the account of the Divided Line is a convenient referential device.

But this is not the whole story—and that is a good thing for Plato. If in *Republic* 5 Socrates were merely using "belief" and "knowledge" in an idiosyncratic way or as terms of art, his success in persuading the perception-lover and Glaucon that the perception-lover merely possessed belief would be facile. There is, I suggest, more substance to the use of "knowledge" and "belief" in the argument. To see why and how, recall that in the introduction I mentioned that there are at least two ways the word "knowledge" can be used. One is propositional. This use corresponds to the accounts of knowledge in *Meno* and *Theaetetus*. More precisely, in these dialogues it corresponds to what I called "explanatory-knowledge." Explanatory-knowledge, I said, is a species of propositional knowledge. The other use of "knowledge" is in reference to a field or body of information such as medicine or geometry.

Consider now the idea that a field of knowledge may be a capacity for propositional knowledge. Take the example of arithmetic as a field of mathematical knowledge. Arithmetic does not include propositional knowledge of the sums of each and every pair of numbers. For example, the field of arithmetic knowledge does not include the propositional knowledge that 7652 + 1833 = 9455. Rather, the field of arithmetic knowledge includes other knowledge that enables one to calculate the sum and so to come to have propositional knowledge that 7652 + 1833 = 9455. Likewise, the field of medicine does not include the propositional knowledge that, for example, Socrates is presently suffering from leukemia. It does, however, include other knowledge that enables a doctor to come to have that propositional knowledge. In short, fields of knowledge are applied to produce certain related, but other knowledge.

In the passage from *Republic* 7 above, Socrates uses "knowledge" to refer to fields of mathematics. Could Socrates be using "knowledge" in the *Republic* 5 argument to refer to a field of knowledge? And would this yield a more intelligible view of the distinction between knowledge and belief in *Republic* 5? We have already seen that knowledge and belief in *Republic* 5 are treated as powers or capacities. I have said nothing about two correlative uses of "belief," and so nothing about a use of belief analogous to knowledge as a field. Let us assume that there is such a use. I will return to this assumption below. Granted then that knowledge and belief are treated as powers or capacities—what are they capacities for? In other words, what are their functions?

In the *Republic* 5 discussion, Socrates explicitly says that knowledge is the capacity for knowing (*epistasthai*), while belief is the capacity for believing (*doxazein*). This is, unfortunately, barely illuminating. Consequently, we must venture a hypothesis. I venture that knowledge is a capacity for making epistemic judgments, where an epistemic judgment is a true belief informed by aetiological reasoning, more precisely by adequate aetiological reasoning. In other words, an epistemic judgment is an instance of explanatory knowledge. In contrast, belief is a capacity to make judgments, but judgments that are not epistemic. In other words, belief is a capacity for doxastic judgments, where doxastic judgment, whether true or false, is uninformed by aetiological reasoning or rather uninformed by adequate aetiological reasoning. (Note that I use the phrase "adequate aetiological reasoning" here just because anyone may provide *some sort* of reasoning to explain and justify a claim; however, I want to emphasize that only someone with knowledge of the appropriate field can provide adequate aetiological reasoning.) Granted this, for example, a doctor (that is, a person with medical knowledge) can make an epistemic judgment that a patient has or does not have leukemia, whereas someone without medical knowledge can merely make a doxastic judgment that a patient has or does not have leukemia.

I briefly mentioned above that Forms are *aitiai*, and specifically *aitiai* of perceptual entities. What this means, at least in part, is that for some perceptual entity that is *f*—in the limited and qualified sense that perceptual entities can be *f*—that entity is *f* because it participates in the Form *F*. In short, a perceptual entity is *f* because of the Form *F*. This metaphysical claim is epistemologically significant in the following way: insofar as explanatory knowledge entails aetiological reasoning, judgment that some perceptual entity is *f* may be aetiologically informed and thus epistemologically buttressed by a grasp of the Form *F*. In other words, a grasp of the Form *F* can serve to explain why a perceptual entity is *f*.

This metaphysical-cum-epistemological point is significant for our understanding of the distinction between knowledge and belief in *Republic* 5 in the following way: in the context of the *Republic* 5 argument, knowledge and belief are explicitly distinguished by their *relata*, and the *relata* of knowledge are Forms. So the philosopher will have knowledge of the Forms. For example, the philosopher will have knowledge of the Form Piety or Justice. This knowledge will enable the philosopher to make epistemic judgments about perceptual participants. For example, it will enable the philosopher to epistemically judge that, say, Euthyphro's prosecution of his father is pious or impious or that returning borrowed items on such-and-such an occasion is just or unjust.

Let us grant, then, that Socrates does use "knowledge" in the *Republic* 5 argument in the sense of a field of knowledge. Evidently, Socrates uses "belief" in an analogous way. That is, Socrates uses "belief" to refer to a body of information that enables the forma-

tion of a doxastic judgment. Since the *relata* of belief are limited to perceptual participants, the body of information that constitutes belief will in some sense be accordingly cognitively limited. For instance, the way in which belief informs judgment cannot be aetiologically adequate. So belief can only produce doxastic judgment. Moreover, doxastic judgment may be true or false; but knowledge will, as Socrates says, be "unerring" and so always produce true judgments.

As far as I am aware, there is no common use of "belief" in English or in ancient Greek that is analogous to the use of "knowledge" as a field of information. Consequently, Plato does appear to be using "belief" in an idiosyncratic way or as a term of art. On the other hand, the fact that there is a common use of "knowledge" as "field of knowledge" provides philosophical justification for Plato's analogous use of "belief." In other words, Plato sees that one may possess a body of information, like a field of knowledge, but cognitively weaker, that enables the production of judgments, but not epistemic judgments; and insofar as belief is a weaker cognitive state than knowledge, although a stronger one than ignorance, it is fitting to characterize that field of information as belief.

Finally, according to the solution to the core interpretive difficulty I am proposing, epistemic and doxastic judgments in *Republic* 5 are equivalent to knowledge and belief in *Meno* and *Theaetetus*. As such, Socrates is indeed using "knowledge" and "belief" in a distinct way in *Republic* 5. Again, he is using them to refer to capacities for distinct kinds of judgment, rather distinct kinds of judgment themselves.

Concluding consideration

The preceding discussion and proposed solution to the core interpretive difficulty leave many questions unanswered. The most important question, or rather cluster of questions, is what knowledge of a field consists in. In particular, how is knowledge of a Form like a field of knowledge? Moreover, how are the various fields of knowledge that constitute various Forms related? In particular, Plato maintains that all knowledge of Forms depends upon knowledge of the Form of the Good. How is this so?

References and further reading

Benson, H. (2000) *Socratic Wisdom,* New York, NY: Oxford University Press.

Burnyeat, M. (1987) *Theaeteteus*, Indianapolis, IN: Hackett Publishing Company.

——. (2000) "Plato on Why Mathematics is Good for the Soul," *Proceedings of the British Academy* 103: 1–81.

Chappell, T. (2005) *Reading Plato's Theaetetus*, Indianapolis: Hackett Publishing Company.

Fine, G. (2003) *Plato on Knowledge and Forms*, Oxford: Oxford University Press.

Gentzler, J. (2005) "How to Know the Good: The Moral Epistemology of Plato's *Republic*," *Philosophical Review* 114: 469–96.

Kvanvig, J. (2003) *The Value of Knowledge and the Pursuit of Understanding*, Cambridge: Cambridge University Press.

Moravcsik, J. (1979) "Understanding and Knowledge in Plato's Philosophy," *Neue Hefte für Philosophie* 15/16: 53–69.

Scott, D. (1995) *Recollection and Experience*, Cambridge: Cambridge University Press.

——. (2006) *Plato's Meno*, Cambridge: Cambridge University Press.

Sedley, D. (1998) "Platonic Causes," *Phronesis* 43: 114–32.

Silverman, A. (2003) "Plato's Middle Period Metaphysics and Epistemology," *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/entries/plato-metaphysics.

Szaif, J. (2007) "*Doxa* and *Episteme* as Modes of Acquaintance in *Republic* V," *Études platoniciennes* 4: 253–72.

Taylor, C. (2008) "Plato's Epistemology," in G. Fine (ed.) *The Oxford Handbook of Plato*, Oxford: Oxford University Press 165–190.
White, N. (1992) "Plato's Metaphysical Epistemology," in R. Kraut (ed.) *The Cambridge Companion to Plato*, Cambridge: Cambridge University Press: 277–310.
Wolfsdorf, D. (2008) *Trials of Reason: Plato and the Crafting of Philosophy*, New York, NY: Oxford University Press (esp. pp. 86–196).

Related chapters

10. Plato on philosophical method: enquiry and definition
20. Understanding, knowledge, and inquiry in Aristotle
31. The Stoic system: logic and knowledge

12
PLATO: MORAL PSYCHOLOGY

James Doyle

Moral psychology and ethics

Moral psychology is the inquiry into human action and character insofar as these are morally evaluable. In this context, however, it is preferable to say *ethically* evaluable, since the Greeks had no word for our distinctive conception of the *morally right* action or *morally good* person (see Anscombe 1958, Williams 1985). "Ethics," as I use the term here, is the reflective inquiry into how to live. The outcome of such an inquiry may follow our conception of morality in recommending that we take into account the interests of our fellows or other people generally, as Socrates, Plato and the ordinary Greek ethical outlook all urged, but it need not do so, as is clear from the narrowly egoistic ethical doctrines of Callicles in the *Gorgias* and Thrasymachus in the *Republic*.

We are all moral psychologists, in the rudimentary sense that we all use perforce the vocabulary of ordinary psychology, and are practically committed to its presuppositions. By "ordinary psychology" I mean simply that framework of explanation of our own and others' actions in terms of what we have in mind: what is the case, what we are aware of or unaware of, what we want, what we remember, hope, decide or repudiate, what we consider fun or good or important or, again, boring or trivial or contemptible. Clearly, ordinary psychology is fundamental to our understanding of ourselves, especially as ethically evaluable authors of ethically evaluable actions; but it is a distinctive mode of explanation of human behavior. This can be seen from cases where other modes are preferred: for a Greek to explain someone's behavior as a result of his being robbed of his wits by a goddess, for example, would be to indicate that the presuppositions of ordinary psychology had lapsed. Philosophical moral psychology takes ordinary psychology as its starting-point, and inquires into how its explanations with their distinctive concepts, in turn, are to be understood, and what their presuppositions are. Thus we see Socrates, in some dialogues, seemingly construing desires as a special kind of judgment with a special kind of object (the agent's good) and, in the *Republic*, arguing that certain psychological phenomena can be explained only if we posit distinct centers of agency within the individual soul.

Moral psychology, so understood, is interested not merely in those aspects of action and character that are themselves subject to ethical evaluation, but in the wider category of aspects that have any bearing on such evaluation: it is the psychology of human agents *qua* ethical beings: self-conscious beings inhabiting a culture and concerned with the question of how to live their lives. Thus the central questions of moral psychology concern the nature of the psychological states, events and processes that figure in the

explanation and evaluation of the actions and characters of human beings so conceived. These will include such events as recognitions, decisions and choices, such states as beliefs, knowledge, desires and emotions, and such processes as imagining and practical deliberation. Further, moral psychology cannot limit itself to third-personal explanation, interpretation and evaluation of human agents *qua* ethical. For it is in the nature of these third-personal explanations to point beyond themselves: they are parasitic on the first-person perspective, in that they satisfy us to the extent that they enable us to understand how *the agent* saw some point in her action. Moral psychology will therefore also have to be concerned with agents' *self*-understandings, -interpretations and -evaluations, and so must give an account of the concepts that figure essentially in those sorts of judgment too. On pretty much any Greek account these will include happiness (*eudaimonia*) and virtue (*aretē*), as being states of the soul at which intelligible agents were presumed to be aiming, and to take themselves to be aiming, at least much of the time. On Plato's own account, notably, moral psychology could not avoid being concerned also with essentially erotic and cultural-political concepts, since he came to believe that these, too, played a vital role in the understanding and self-understanding of human agents in their ethical capacity.

Virtue, happiness and Socrates' question

Plato's Socrates is perhaps the first great moral psychologist. But the inquiry he takes himself to be exclusively engaged in is not that of moral psychology at all, but *ethics*. His question, in the "Socratic" dialogues, is always: "How should I live?" This is not always obvious, because he tends to phrase it in different-sounding ways. Often he poses a question about how to define a particular virtue (*Euthydemus*, *Charmides*, *Laches*, *Lysis*, *Republic* 1); sometimes he says he is trying to find out "who is happy and who is not" (*Gorgias*); and he sets the discussion going in the *Gorgias* by getting Chaerephon to ask Gorgias *who he is*. To see why these are all the same question, or parts of it, we need to get clear on some features of the Greek concepts of happiness (*eudaimonia*) and virtue (*aretē*). And clarity about these concepts is necessary for understanding much else about Socrates' and Plato's moral psychology besides. In particular, it will avoid the tempting error of supposing that, when Socrates says that virtue is (more or less) necessary and sufficient for happiness, he is making something like the claim modern moral philosophers would express by saying "it is rational to be moral."

While *happiness* is usually the best one-word translation of *eudaimonia*, it can in some contexts be misleading. It is sometimes better rendered as *well-being* or *flourishing* or something along those lines, because it has a more objective flavor than our *happiness*: there is more scope for first-person error as to whether one enjoys *eudaimonia* than there is on the question of happiness, which we nowadays tend to conceive in a rather subjectivist and pluralist kind of way. It sounds odd to us to ask what happiness really amounts to *for anyone*, whereas for Socrates, Plato, Aristotle and most other Greek ethicists, the corresponding question about *eudaimonia* was not only perfectly intelligible but the central question of ethics. The concept was crucial for Greek ethics and moral psychology because the question of how to live was taken to be equivalent to that of what sort of life would enable one to attain, or perhaps would constitute, *eudaimonia*. This equivalence gave the concept much of its point, and it was central to moral psychology, relatedly, because very nearly all Greek writers on ethics and psychology, certainly including Socrates, Plato and Aristotle, took for granted some form of the doctrine modern scholars

call *eudaimonism*, which involves at least the supposition that if anyone acts in a way that they know will detract from what they conceive of as their *eudaimonia*, this raises serious questions about the intelligibility of their action (see e.g. *Apology* 25d3, *Meno* 78a4–8, *Protagoras* 358c6–d4, *Gorgias* 467c5–468c8). (Notice that this Greek platitude casts doubt on the intelligibility of the fundamentally self-sacrificial conception of "doing one's moral duty," as propounded by such modern moralists as Kant. While the Greeks generally regarded a willingness to risk one's life in battle for the sake of one's city, for example, as a virtue—or even, as in Homer, *the* virtue—this was intelligible only insofar as their idea of *eudaimonia* included posthumous glory, understood largely independently of the meaningful survival of death.) According to a stronger and, to modern ears, rather implausible form of the doctrine (which was endorsed by very many Greek ethicists, again including Socrates, Plato and Aristotle), all fully intelligible human action ultimately aims at what the agent conceives to be their *eudaimonia*.

"Virtue," on the other hand, is actually a quite seriously misleading translation of *aretē*, and I use it only because it is now too well-entrenched to oppose. The English word sounds rather quaint and Victorian, precisely because it has connotations of moral earnestness which the Greek word lacks. The root meaning of the Greek word is "excellence," in the sense of a quality that makes a thing good of its kind. What counts as such a quality therefore radically depends upon what kind of thing is in question: a good knife will standardly be sharp, a good musical instrument in tune. But what makes for a good human being? Here we must be careful, for the category of the *moral* so pervades our thinking about ethics that it can be quite difficult not to hear the phrase "good human being" as "*morally* good human being." But an *aretē* is a quality that makes one good *at being* a human being, and while one may argue that "other-regarding" qualities like benevolence and generosity fit this description, there is nothing in the concept of an *aretē* to prevent one from arguing, as Callicles did, that the true or "natural" virtue of justice comprises the intelligence and courage of the strong natures that enable them to dominate the weaker and appropriate their possessions, and the freedom from inhibition that enables them to magnify and indulge their appetites to the utmost (*Gorgias* 482c4–486d1, 491e5–492c8). While Socrates spends the remainder of the *Gorgias* arguing against Callicles' conceptions of *aretē* and *eudaimonia*, the important point for our purposes is that he never once suggests that there is anything immediately contradictory in Callicles' claim that these rapacious and self-indulgent qualities are *aretai* at all. This, however, would be the obvious retort, if it were part of the *idea* of an *aretē*, as it is part of our idea of many of the virtues and certainly justice, that it requires one to take others' interests into account. Roughly speaking, if I have a virtue in the modern "Victorian" sense, this is by definition good news for other people, but it is an open question whether it is good news for me; whereas if I have an *aretē*, this is by definition good news for me, but it is an open question whether it is good news for other people.

We are now in a better position to understand why the different-sounding questions the various Socratic dialogues are structured around are all at bottom one and the same. The question of how to live is the question of how to act, and how I act depends upon what sort of person I am, which is to say upon the qualities of my character. But the qualities of character, whatever they are, that are manifested in actions that add up to the best human life, whatever that is, are simply the virtues (as I shall continue to call the *aretai*, subject to the caveats above). Now, Socrates believed, for reasons we will look at later, that if I know what the virtues are—if I can define them—then I will necessarily act in accordance with them. By definition, then, consistently acting in

accordance with the virtues will amount to living the best kind of life, and to know the definitions of the virtues will be to know how to live.

Socrates also believed that the happy man and the virtuous man were one and the same. (Strictly speaking we should talk here of the man capable of acting virtuously, as Socrates did think that someone suffering from a seriously debilitating disease of the body could not be happy, whatever the state of his soul: *Crito* 47e3–4, *Gorgias* 505a2–4.) This will not look implausible, and can even come to look rather like a conceptual truth if, when we talk about the virtues, we keep carefully to the core meaning of *aretai* as the qualities that are manifested in the actions that add up to the best human life and if, when we talk about happiness, we keep carefully to the core meaning of *eudaimonia*, as well-being or doing well. The man with those qualities will therefore be living the best human life, which is to say that he will be doing well, and will therefore be happy. Conversely, since the happy man does well, and doing well is a matter of living the best life for a human being, and the virtues are necessary for that, *only* the virtuous man will be happy.

So the questions of how to define the virtues, of how to live, and of who (what sort of person) is happy, are all at bottom one and the same, in the sense that there is no way to be able to answer any of them without being able to answer all of them. And to ask Gorgias who he is, is to ask him what sort of life he leads, which, since Gorgias is an orator, is to ask "What is rhetoric?" The life of the orator will constitute Gorgias's own lived answer to the question "How should I live?"

To put this point in a slightly different way: when we first encounter Socrates' saying that it is in our interest to acquire the virtues because they will make us happy, we are liable to the tempting error, as I put it earlier, of supposing he is claiming that, as moral philosophers nowadays would put it, "it is rational to be moral." Once we get clearer on the relevant concepts of virtue and happiness, we see that the Socratic claim is not in itself an ethical thesis at all, because it doesn't (in itself) tell us anything about how to live; rather, it is a conceptual truth about Greek moral psychology that can be agreed upon by all sides of the ethical debates. Callicles, for example, can agree to it, and there is no more extreme ethical opponent of Socrates than he.

Socrates only breaks out of this rather small circle of moral-psychological concepts and broaches the real ethical issues when he goes on to make claims about *what the virtues actually require*: that the true virtue of justice, for example, does not consist in dominating others, as Callicles urged, but in refusing ever to harm them (*Crito* 49c2–3), and, further, that, on a correct understanding of justice, harming others is worse (as ever, for oneself!) than being harmed (*Gorgias* 469b8–c2). These claims and others like them give us the substance of Socratic ethics, and for this reason we won't go into them further here.

One reason it is easy to miss the triviality of the claim that the virtues will make us happy is that Socrates himself tends to hide it. In various "Socratic" dialogues, he effectively trades on an ambiguity, between the root sense of justice *qua* virtue as an advantageous trait, and the conception of justice as other-regarding which, although generally accepted, cannot be assumed to be essential to it *as a virtue*. That is, he tends to rely upon the conceptual connection between virtue and happiness (for example, *Apology* 30b2–4, *Meno* 87d2–e4, *Hippias Minor* 375c6–d1, *Charmides* 175d6–e2) while assuming, rather than arguing, that the virtue of justice does require us to take into account others' interests: in fact, to refrain completely from harming them (*Crito* 49c2–3). But why should justice as a virtue—in the root sense of a trait that it is advantageous to have—require *that* of us? Socrates is finally forced to face this question when in the

Gorgias Callicles presents his manifesto for "natural" justice. This is why it is so important that Callicles, unlike Thrasymachus in the *Republic*, never denies that justice *is* a virtue. On the contrary, he takes this status utterly seriously, the better to focus on its core meaning: what *are* the traits it is advantageous to have in one's dealings with other people? (I ignore here the complication that Callicles is concerned only with the strong and talented.) The answer to that question will give us an account of justice on which it really *is* guaranteed to be a virtue. But on an account of that sort, it may turn out to have nothing at all to do with respecting others' interests.

Socratic moral psychology

Socrates is trying to answer the central question of ethics, rather than moral psychology, but the way he poses that question and the way he goes about trying to answer it reveal a moral psychology of great power and, many have thought, deep implausibility. The overarching doctrine here is what scholars refer to as "Socratic intellectualism," and consists of the identification of virtue with a kind of knowledge. In the *Apology* and elsewhere Socrates seems to imply that the knowledge that constitutes virtue is unattainable by human beings (*Apology* 23a5–b4, *Gorgias* 508e6–509a7), but he insists that the most important task for any human being is the attempt to attain it (*Apology* 29b9–30a2, 38a1–6): to bring his beliefs about the relevant subject-matter as close to knowledge as possible, which presumably amounts to making those beliefs as justified as possible—but what is the relevant subject-matter? In dialogues devoted to individual virtues such as the *Euthyphro*, *Laches* and *Charmides*, Socrates is portrayed as engaging in just this project—of moving the relevant beliefs of himself and his interlocutors as close as possible to the knowledge in question—and it is natural to suppose that that unattainable knowledge would have the same sort of content as the beliefs that aspire to it. Since the beliefs under examination in those dialogues concern the definitions of the virtues, then, the relevant knowledge will presumably be of those definitions as well. As Socrates also maintains, for plausible reasons we will not go into here, that the virtues are a unity in the sense that it is impossible to have any one of them without having them all, he must hold that being virtuous is a matter of knowing the definition of virtue: but how could knowing the definition of *anything* be enough to guarantee that one will always act in the best way? The idea seems to be something like this: to know the definition of virtue is to know what virtue requires in any situation; but remember the conceptual connections between *aretē* and *eudaimonia*: action in accordance with virtue is always action that's best *for the agent*, and the knower of the definition of virtue will know this, too. So: if a person knows which action will benefit them most, why wouldn't they perform it (*Apology* 25d3, *Meno* 78a4–8, *Protagoras* 358c6–d4, *Gorgias* 467c5–468c8)?

Socrates' intellectualism has been widely denounced as false. Knowledge (or maximally justified belief) of which action is most conducive to one's well-being, it is generally thought, is not the only psychic condition of performance of that action. There is also the affective and appetitive side of human agency, which must fall into line with what one knows or believes to be best, if one is to act well. To maintain that virtue is knowledge, and vice ignorance, Socrates has to hold constant the ultimate object of human desire. Everyone desires what is best or (what does not conflict with this!) what is best for themselves, so that their going astray can only be a matter of not having an accurate conception of what is in fact best. Many have alleged that this Socratic account cannot make sense of a large range of failures of agency which cannot be construed in

terms of cognitive deficiency: perverse action, for example, in which we knowingly act against our own interests; and, above all, akratic action, in which the agent knowingly chooses what is worse because they are tempted by desire for pleasure or fear of pain.

Notice that the equation of virtue with knowledge need not by itself even seem directly to involve an objectionable denial of the affective and appetitive side of human agency. It all depends on what kind of knowledge is at issue. One might hold, for example, that it is an irreducibly practical kind of "knowing-how," the possession of which amounts, in part, to the right kind of affective and appetitive configuration of the knower's soul; or that it is a kind of propositional knowledge which nevertheless cannot be properly acquired, or perhaps even understood, without the attainment of such a configuration as a necessary condition (Segvic 2000).

These ways out are not available to Socrates, however. In the *Apology*, when he implies that the state of a person's soul in respect of virtue and happiness entirely depends on the person's beliefs, he means beliefs that one might be reasoned into or out of in the course of Socratic philosophical conversation or elenchus: *elenctically accessible* beliefs, as one might call them. (Cf. *Laches* 190c6: "Presumably if we know something, we're in a position to say what it is?") These beliefs do not, then, presuppose emotional or non-propositional states, from which they might inherit immunity to refutation. On the contrary, since Socrates takes beliefs to determine, fundamentally, the soul's position between virtue and vice, but also acknowledges (for example, in the first sentence of the *Apology*), as he must, that emotions can incline one towards one belief rather than another, we should expect him to construe those emotions in turn as forms of belief and, furthermore, forms susceptible of elenctic modification. This is exactly what we do find Socrates doing in his one case-study of emotion in the *Apology*, which concerns surely the emotion liable above all others to distort our thinking in its ethical dimension: the fear of death: "To fear death, gentlemen, *is nothing other than* to think oneself wise when one is not" (29a4–6, my emphasis). Emotions are included under the heading of belief, not because Socrates conceives of beliefs as emotionally implicated (which would surely render some of them elenctically inaccessible), but because he conceives of emotions, themselves, as beliefs with a special subject-matter: the good (by which I mean what sorts of thing are good and what bad).

The whole point of elenctic conversation, then, is to move in the direction of knowledge the very beliefs on which one's prospects for *eudaimonia* depend. That is why Socrates says that he makes the Athenians happy (*Apology* 36d1–37a1) and the unexamined life is not worth living (38a5–6). Intellectualism and the elenchus in these dialogues are really just theoretical and practical expressions of the same fundamental idea: Socrates really does think that one's prospects for happiness depend on one's purely intellectual accomplishments.

Why does he think this? On the face of it, Socrates' intellectualism looks like a grotesquely erroneous moral psychology. Plato (in the dialogues that are *ipso facto* un-Socratic) and Aristotle both abandoned it (although they retained some version of the identification of virtue with a kind of knowledge), and made their abandonment fundamental to their own doctrines. On this showing, while he may be one of the first moral psychologists, it is hard to see how, as I claimed above, Socrates might be accounted a great one. The apparent implausibility of the intellectualist view has recently been cited as a reason to dismiss it as a misunderstanding: Socrates' real view has been alleged on this basis to be much closer than usually supposed either to common sense (Segvic 2000) or to the supposedly later and distinctively Platonic picture (itself less at odds

with common sense; see below). This Platonic vision, however, is in turn interpreted as rather closer than usually supposed to the standard but rejected view of Socratic intellectualism (Rowe 2009)!

Yet if Socratic intellectualism is profoundly mistaken, it is—for all that—profound. It points to a central and problematic feature of ordinary psychological explanation I mentioned earlier. In fact, the implausibilities of intellectualism are really consequences of treating that feature with relentless seriousness. The faculty of reasoning is only one component of ordinary psychology: that framework is equally committed to the reality of motivated but non-compulsive irrationality, such as self-deception, weakness of will and imprudent overindulgence in emotions like anger and lust. The Greeks, perhaps more so than ourselves, regarded self-control as a cardinal virtue and its corresponding vices as ubiquitous. Yet once the philosophical business of moral psychology is underway, the reasoning faculty of its nature is not content to enjoy equal terms with these forms of irrationality among the explanatory resources of ordinary psychology, and reveals itself as harboring imperialistic ambitions. A central feature of the ordinary psychological model, to repeat, is that actions are to be explained—in a certain sense—from the agent's perspective. Thus, we are satisfied with the explanation insofar as it enables us to see how the agent could have seen some point in what they were doing. Actions are therefore seen as explicable from the observer's perspective exactly because they are rational from the agent's perspective. This idealization is built into the very fabric of much of our ordinary psychological vocabulary; but it inevitably tends to make irrational action look inherently inexplicable. If we try to make room within our model of practical reasoning for motivated irrationality, the result is rather like what happens in physics if we try to factor in the frictional properties of surfaces: none of the beautiful equations will hold any more. We see this in philosophers' attempts to give a systematic psychology that will accommodate such forms of irrationality: no account that stays within the confines of ordinary psychology has ever proven adequate to the task. We are always left with the question, "but *why* did the person do something other than what he believed he had most reason to do?" To answer by appeal to any reason believed by the agent to be less good than the best available is to invite a repetition of the question, although the question is obviously unanswerable by appeal to the best overall reason: one cannot have overall reason to do anything other than what one has overall reason to do! If the question is read instead as answerable by appeal to a "mere cause" operating independently of any awareness on the part of the agent—a factor of a *kind* that no agent could ever bring forward as justifying, as opposed to explaining, what they had done—then we seem to have stepped outside the bounds of ordinary psychological explanation all together. (One sign of this is that no straightforward attributions of responsibility will now be possible.) This is what happens when we explain what someone did by reference to a goddess who stole his wits, or to posthypnotic suggestion, or to a psychotic episode triggered by a chemical imbalance in his brain, but *akrasia*, perversity and the rest aren't supposed to be like that. They are supposed to figure in the special sort of explanation that gives reasons of a sort that the agent somehow still has to own. It's just that they are *bad* reasons, and our conception of practical reasoning, taken by itself, doesn't seem to leave room for the idea of an effective reason that isn't a good one.

There seems to be a fundamental tension in ordinary psychology, then, between forms of explanation that invoke reason and understanding, and forms that invoke the familiar kinds of practical irrationality. For the former to be applicable anywhere, they

seem to have to be applicable everywhere, and so rule out the possibility of the latter: there seems to be no coherent account of agency unless the agency is itself fully coherent. How should the moral psychologist deal with this tension? There seem to be two main options. One is *reform from within*. Socratic intellectualism is a version of this strategy: it takes explanations in terms of practical reasoning entirely at face value and simply denies the reality of the seemingly irrational phenomena, redescribing them as ignorance of the good. The other option is *drastic supplementation from without*. This strategy aims to accommodate both sorts of psychological phenomena within a single explanatory framework by embedding ordinary psychology in a much wider theory that appeals to entities, states and processes ordinary psychology never dreamed of. The aspiration is that once the ordinary psychological phenomena, both rational and irrational, are understood in the context of the radically new wider theory, their significance is transformed in a way that reveals them as no longer in tension. This is the strategy that Plato has Socrates follow in dialogues in which Socratic intellectualism is decisively abandoned, most notably the *Republic* and the *Phaedrus*. It is also the strategy of Plato's great successor-psychologists, Augustine and Freud. Ordinary psychology emerges as the tip of an iceberg, and the radically novel wider theory is supposed to tell us what goes on below the waterline. The new theory gives us a new understanding of the familiar psychological phenomena, whereby they are now seen as results of an interplay of largely unfamiliar forces. These forces can also be seen to be of a sort to give rise to those curious factors, *bad reasons*, which in the context of unsupplemented ordinary psychology seemed hopelessly stranded between the realm of the justifying reasons of practical deliberation, and that of blind causes that could not possibly be in the business of justifying anything. Thus motivated irrationality is made intelligible. Such, at any rate, is the aspiration.

Platonic moral psychology

According to Socratic intellectualism, an action always expresses its author's judgment about what it's best for him to do. As we have seen, this immediately rules out the possibility of *akrasia*, and of any other kinds of action known to be contrary to best judgment. (We should not be distracted by scholarly controversy over whether Socrates' explicit argument against *akrasia* in the *Protagoras* is really given in his own voice: that controversy concerns the attribution of the hedonistic premises, not the intellectualist conclusion, which is in any case a direct implication of the many statements of intellectualism in the Socratic dialogues.) Socrates reformed ordinary psychology from within at the cost of rendering it unrecognizable. Plato came to see this cost as far too high. The appetitive and emotional sides of ordinary psychology and their manifestations in the various forms of motivated irrationality, he thought, can be given their due, and the role of reason in human action can be coherently conceived as subject to limitation, if the soul is thought of as a *structured composite*.

Moral psychology, as a self-conscious inquiry into the structure of the soul as revealed in action, only really gets going once Plato has Socrates leave intellectualism behind. Insofar as intellectualism involved any conception of the soul, it is as a kind of unstructured container of beliefs (Lear 1988a). This seems to be abandoned in the *Gorgias*, in which Socrates talks of the soul having parts, and construes self-control as an *ur*-virtue consisting of those parts' being ordered or structured in the right way (492e7–494a5, 503d5–504d4, 506c5–508a8).

There are other indications in the *Gorgias* of a move away from Socratic intellectualism. There is a new concern with the formation and distortion of belief by forces that seem inherently resistant to control by the elenchus or, more generally, by reason, such as: pleasure (464c3–d2), the desire for argumentative victory (in which Callicles is a case study) and (relatedly) the directedness of a person's *erōs* ("sexual desire," 481c5–482c3). The last of these is a new theme which is subsequently taken up and explored with extraordinary imaginative virtuosity in the *Phaedrus* and the *Symposium* (dialogues which are certainly "later" than the *Gorgias* at least in dialectical sequence, in that they are heavily invested in the Platonic doctrine of Forms, of which the *Gorgias* betrays no inkling). In these dialogues Socrates talks of *erōs* as a fundamental psychic force highly malleable in character and object. Only in its lower manifestations does it correspond to our ordinary conception of the erotic; in its higher forms it is directed toward more refined and, in the end, abstract objects, and in fact underlies the drive toward philosophizing itself, with decisive consequences, in the *Phaedrus*, for the fate of the soul after death. (Freud plausibly regarded this account of *erōs* and its potential refinement not as anticipations of his own concepts of libido and sublimation, but simply as those very concepts themselves.) The details of Plato's conception of *erōs* are as fascinating as the overall picture, but further examination here would take us too far afield.

This erotic basis of philosophy is clear even from the brief mention of *erōs* in the *Gorgias*, where Socrates professes his twofold love of Alcibiades and philosophy (481d). Such an "erotic" commitment to philosophy is presumably not something one can be argued into, but Socrates strongly implies that it is a precondition of effective (that is, truth-conducive) participation in philosophical discussion. If one's *erōs* is directed instead, as Socrates alleges of Callicles, toward manipulating the masses or, as Callicles' is revealed to be in the course of the *Gorgias* conversation itself, toward victory in argument, such discussion will typically be not merely unavailing but harmful. Thus the recognition of *erōs* as a fundamental psychic force requires us to abandon the universally beneficial aspirations for the elenchus Socrates expressed in the *Apology* and, as a corollary, to moderate quite drastically the extreme form of intellectualism those aspirations presupposed.

Notwithstanding these new departures from the intellectualism of the *Apology*, Plato conspicuously does *not* have Socrates acknowledge the possibility of *akrasia* in the *Gorgias*. He does this quite emphatically in the *Republic*, in the course of arguing for a much more detailed and less tentative account of the soul as a structured, composite entity. The *Republic* thus marks the decisive break with intellectualist moral psychology and its associated conception of the soul.

The *Phaedo*, although dialectically "later" than the *Gorgias* (it is largely preoccupied with those "middle-period" themes of immortality and the Forms) gives us a Socrates who has retreated some way from the *Gorgias*'s conjectures about parts of the soul. The soul in the *Phaedo* is conceived of as identical with the intellect, and one of the four arguments for the soul's immortality in that dialogue (78b1–80d3) actually depends upon the soul *not* having parts. The intellect is thought of as typically in conflict with appetite, emotions and sense-perception, but these are located not in parts of the soul but in the *body*. This gives rise to an irreconcilable conflict in the *Phaedo*, especially as other arguments of the dialogue require us to regard the body as belonging to the world around us where that is sharply contrasted with the intelligible realm. In recording his eventual disappointment with the world-view of Anaxagoras, Socrates delivers perhaps the first polemic, still one of the most effective, against physical explanations as incapable of making human decisions intelligible: a person's body, understood (plausibly) as a

living system of organs, could not possibly contribute in any direct way to their choosing to do one thing rather than another (*Phaedo* 98b–99b). Yet in housing appetitive desire, emotion and sense perception in the body, Socrates is requiring it to make exactly such a contribution. At best, there are two notions of *body* in play, and the notion appealed to as the locus of appetite and the rest has to be construed as being itself a soul-like entity with its own (however rudimentary) point of view. When in the *Republic* Plato has Socrates instead locate appetitive desire and emotion in parts of the soul, he is taking the shortest available route of escape from this glaring inconsistency in the *Phaedo*. This route takes him back to the sort of view tentatively sketched in the *Gorgias*, but in the *Republic* it is boldly asserted as a central doctrine, spelled out in some detail, supported with compelling arguments and closely integrated with an equally ambitious account of politics and culture.

By the time he wrote the *Republic*, then, Plato was determined to do justice to the genuine reality of intrapsychic conflict among the bases of human decision and action, and had come to believe that this in turn required a conception of the soul as having parts. The basic idea is highly plausible on its face: genuine intrapsychic conflict (as opposed to a mere appearance of conflict to be explained away, as in the *Protagoras*, or the soul's confrontation with alien bodily forces, as in the *Phaedo*) requires more than one party; so if there really is conflict within the soul, the soul must house separate elements capable of engaging in such conflict with each other. More precisely, Socrates relies upon the principle that "the same thing will not do or undergo opposite things in the same respect in relation to the same thing at the same time" (436b7–8). It clearly often happens that the soul is inclined toward something (for example, drink, through thirst) but also is averse to the same thing (for example, it wants to refrain from drinking, for dietary reasons); and in many of these cases the contrary attitudes are held in the same respect with the same object at the same time, so that the only way to avoid violating Socrates' principle seems to be to posit two elements in the soul. In typical versions of the drinking case the source of the inclination to drink is whatever in the soul gives rise to appetite more generally, while the source of the aversion to drinking is reason or calculation. Socrates appeals to similar examples which he claims, in conjunction with his principle, require us to posit a third element in the soul, distinct from both reason and appetite, which is responsible for anger, revenge and a concern for one's reputation. Most scholars translate Plato's word for this third part as "spirit" or "the spirited part." I will use *Reason*, *Spirit* and *Appetite* as convenient one-word "translations," but the reader should not pay heed to any but the most basic connotations of these words.

This argumentative move of Socrates' is over in a couple of pages of Book Four of the *Republic*, but it is philosophically momentous. On the one hand, it holds out the promise of an extraordinarily rich idiom for describing and explaining everything about human psychology that Socratic intellectualism seemed to leave out of account: the ubiquitous intrapsychic conflicts that cry out for analysis in structural terms, rather than by appeal to the contents of homogeneously-conceived beliefs about the good. It also gives us a much more versatile and compelling way of understanding good and bad states of the soul (virtues and vices), and the conditions, especially the cultural and political conditions, under which they arise, in terms of relations among its parts. On the other hand, once we start asking awkward questions of detail, it is very difficult to see precisely what the new "tripartite" model of the soul amounts to. As plausible and liberating as it initially seems, upon scrutiny it seems to generate a number of paradoxes and other acute difficulties.

The main issue I would like to look at is what Plato can mean in having Socrates speak of the soul having parts and, in particular, how close the soul-parts are supposed to be to fully-fledged agents. This may be addressed by looking at the two current main competing styles of interpretation. In one, the soul-parts are thought of as fully-fledged psychic agents animating, competitively or co-operatively, a single body (see Lorenz 2006, Bobonich 2002). In this interpretation, the relevant psychological predications made of the person as a whole (for example, that they desire to drink through thirst, but hold back on the basis of reasoning) are rather misleading, because the real subjects are the soul-parts: the whole-person predications are at best a shorthand for the predications properly made, in our example, of Appetite and Reason. The whole-agent ascription (that is, of a desire) is explained—or, perhaps, its real meaning is given—by the ascription to the relevant part(s); it is the latter that gives us "what's really going on." On the other reading, the talk of "parts" is understood as marking a distinction between different kinds of mental functioning or different sorts of psychological capacity, in a way that leaves us free to think of the soul as strongly unified: it really is true to say that the person desires and holds back, although we must bear in mind that it is true *in virtue of* the exercise of distinct capacities which, whatever kind of autonomy they may enjoy, remain the capacities of a single individual and are themselves subjects of psychological predicates only in an incomplete or analogical way (see Price 1995). So here the relations of explanation and meaning-dependence go the other way: the significance of the ascription of, for example, a desire to a soul-part is given by its contribution to the overarching ascription to the composite soul, which is the true locus of agency. This second line will tend to regard Socrates' talking of parts as if they were fully-fledged agents as, ultimately, a dispensable manner of speaking.

The first interpretation gives us a theory that is indeed revolutionary, but to the point of great implausibility. As Price alleges, it seems to amount to a construal of each human being as a set of Siamese triplets (perhaps with some mutual mindreading capacities). It is also committed to a story about how we come to understand agency which, while not incoherent, is decidedly strange. Since we are supposed to think of the soul-parts as fully-fledged agents, there is a question about where we got our concept of psychic agency. The only plausible candidate is: from acquaintance with complete human beings—especially ourselves—as vehicles each of a single soul. But the theory, on this reading, tells us precisely that human beings (or their souls) are not really (single) agents, but compounded (somehow) out of trios of such. So the paradigm case by reference to which we necessarily come to understand what an agent is turns out not to count as an agent at all. Our concept of agency comes, not from what human beings are, but what we erroneously took them to be; and the concept turns out to have its proper application to each of a plurality of entities, whose interactions explain the doings of precisely those human beings we mistook for single agents when we originally acquired the concept.

The second interpretation seems to bring the theory close to a tame re-description of common sense rather than the bold reconfiguration of psychology Socrates aims to effect in Books Four and Nine of the *Republic*. To the extent that the subjecthood and agency of the soul-parts are to be understood only analogically or incompletely in relation to the human agency with which we are familiar, we lose the explanatory punch that came from conceiving of intrapsychic conflict as real conflict, on a par with conflict between people (or groups of citizens). After all, even the intellectualist Socrates accepted that the soul might experience some forms of dissonance—inconsistent beliefs, for example, which it was the task of the elenchus to bring to light.

Furthermore, both interpretations face the serious difficulty that Socrates in the *Republic* often seems to talk as though the other were correct, so that proponents of each are required to expend a great deal of energy explaining away apparent evidence against it. Both interpretations depend upon the assumption that there is such a thing as *the* relation between predications of the whole soul and predications of its parts, but the detailed parallels Socrates draws between the soul and the *polis* (city-state) call this assumption into question. The important point here is that Socrates in the *Republic* takes the good condition or virtue of a soul *or* a city to consist in its really being a *single* or *unified* soul or city:

> "But consider whether the concentration of the wealth of the other cities in a single one brings danger to the city without wealth," [said Adeimantus]. "You are pleased to think that what differs from the sort of city we're putting together is yet worthy of being called a *city*," I said. "But what should we think instead?" he said. "The others must be called something greater," I said. "For each of them is *not a city, but very many cities* … Apart from anything else, you have two at odds with each other, the poor and the rich. And in each of these there are very many more. If you approach them as if they were a single city, you will go completely astray … "
>
> (422d9–423a3, my emphasis.)

Later in Book Four (443e2–3), Socrates spells out the significance of the political case for the individual: the virtuous man really is "one man made out of many"; the vicious man by contrast is many, not one. The dysfunctional city and soul have parts that are in chronic conflict with each other, so that we really do not have one city or one soul at all, but a plurality. For Plato, a vicious soul is like a disallowed goal, a forged banknote or a fake diamond: the force of the adjective is to indicate that the noun doesn't really apply. If we take this idea seriously, there cannot possibly be a generic relation between whole-soul predication and soul-part predication that remains constant in both the virtuous and vicious cases, if only because in the vicious case there is strictly speaking no whole soul to speak of at all. This suggests that in his general treatment of soul-parts (for example, in his argument for their reality) Plato left it deliberately indeterminate what the relation might be. In the vicious case, the primary (and at the extreme, the only) subjects of psychological states are the soul-parts: what we say about the whole soul is at best a summary of this, at worst a mere fiction. The Lorenz-Bobonich interpretation, whereby the soul-parts are the proper subjects of psychological states, is therefore correct for this kind of case, for the simple reason that there is nothing else for such subjects to be. But if a virtuous soul really is one—in the sense in which each of the soul-parts of the vicious man is one—then it must have a claim to be a robust subject of psychological states. For in what else could its being truly one consist? So a Price-type analysis will be more appropriate here, whereby the parts are not free-standing psychological subjects, but their states are to be understood primarily in terms of their contribution to the full-fledged psychological states predicated of the soul as a whole. Recall that the rationale for positing soul-parts in the first place in Book Four was given entirely in terms of conflict. Such a rationale inevitably wanes in proportion as such conflicts peter out, and disappears altogether in the perfectly virtuous soul whose "parts" are in perfect agreement about how to live. The parallel with the city yields a residual reason for positing parts, because the perfect agreement of

the three classes of citizen in the perfectly just city does not obliterate the distinction between the classes; but translated back into the psychological case the analogy supports a conception of the "parts" as harmoniously aligned types of psychic functioning rather than distinct centers of agency. There seems little point in attributing full-blown psychological subjecthood to Spirit and Appetite if they always, and uncomplainingly, follow Reason's lead. In the end, even the idea of "following" Reason might involve too much by way of autonomy.

The *Republic* is the high-watermark of Plato's systematic theorizing about the composite soul, but the idea of conflict and concord among parts of the soul—or at least distinct tendencies within it—as the basic determinants of human psychology is not something Plato changed his mind about in dialogues widely and plausibly regarded as later than the *Republic*. The poetic eschatology of the *Phaedrus* (244a–257b) has already been mentioned in this connection. The *Timaeus* presents an account of the soul's manufacture and embodiment by the divine craftsman and the divinities under his direction (41a–44d, 69a–72d). The implications for the soul's nature are broadly consistent with the account of the *Republic*; the two "lower" soul-parts are described as necessitated by the soul's embodiment, as directed toward its embodied functioning, and as themselves mortal (cf. *Republic* 611b–d). The *Laws* revisits a central preoccupation of the *Republic*'s: the decisive impact of the cultural environment on the contest for supremacy among the different tendencies (if not parts; see Bobonich 2002) of the citizens' souls and, therefore, on their prospects of attaining virtue and happiness (e.g. 626b–636e, 688a–689e, 726aff.).

References and further reading

On the perils of trying to understand ancient ethics and moral psychology in terms of our conception of *morality* see:

Anscombe, G. E. M. (1958) "Modern moral philosophy," *Philosophy* 33: 1–19.
Williams, B. (1985) *Ethics and the Limits of Philosophy*, London: Fontana.

My account of the transition from a radical intellectualism to the composite-soul theory of the *Republic* must now be described as to an extent "traditional" in the light of recent work calling the idea of such a transition into question. For a reading of Socratic intellectualism that makes it much less counter-intuitive, see:

Segvic, H. (2000) "No-one errs willingly: the meaning of Socratic intellectualism," *Oxford Studies in Ancient Philosophy* 19: 1–46.
For interpretations alleging significant continuity between the moral psychology of the Socratic dialogues and that of the "middle-period" dialogues, see:
Rowe, C. (2007) *Plato and the Art of Philosophical Writing*, Cambridge: Cambridge University Press.
Rowe, C. (2009) "Reading Socrates in Plato's dialogues," *Hermathena* 186: 25–41.

and many of the papers in:

Barney, R., Brennan, T. and Brittain, C. (eds.) (2012) *Plato and the Divided Self*, Cambridge: Cambridge University Press.

For a very succinct but illuminating version, in broadly psychoanalytic terms, of the "traditional" account of the transition from Socratic moral psychology to Plato's conception of the structured psyche see:

Lear, J. (1988a) "An Interpretation of transference," in his *Open Minded: Working Out the Logic of the Soul*, Cambridge, MA: Harvard University Press: 56–79.

On *erōs* see:

Ferrari, G. R. F. (1992) "Platonic love," in R. Kraut (ed.) *The Cambridge Companion to Plato*, Cambridge: Cambridge University Press: 248–76.
Lear, J. (1988b) "Eros and unknowing: the psychoanalytic significance of Plato's *Symposium*," in his *Open Minded: Working Out the Logic of the Soul*, Cambridge, MA: Harvard University Press: 148–166.
Sheffield, F. (2006) *Plato's* Symposium: *The Ethics of Desire*, Oxford: Oxford University Press.

On interpreting the idea of parts of the soul in the *Republic* see:

Bobonich, C. (2002) *Plato's Utopia Recast: His Later Ethics and Politics*, Oxford: Oxford University Press.
Lorenz, H. (2006) *The Brute Within: Appetitive Desire in Plato and Aristotle*, Oxford: Oxford University Press.
Price, A. W. (1995) *Mental Conflict*, London: Routledge.

For an interpretation that rejects the idea of a canonical relation among the soul's parts but then takes a much more radical direction than the reading sketched here, see:

Whiting, J. (2012) "Psychic contingency in the *Republic*," in Barney, R., Brennan, T. and Brittain, C. (eds.) (2012) *Plato and the Divided Self*, Cambridge: Cambridge University Press: 174–208.

On Platonic psychology after the *Republic*, see:

Bobonich, C. (2002) *Plato's Utopia Recast: His Later Ethics and Politics*, Oxford: Oxford University Press.
Bobonich, C. (2010) "Images of irrationality," in C. Bobonich (ed.) (2010) *Plato's Laws: A Critical Guide*, Cambridge: Cambridge University Press: 149–71.
Johansen, T. (2004) *Plato's Natural Philosophy: A Study of the Timaeus-Critias*, Cambridge: Cambridge University Press: Chapter 7, "Body, Soul and Tripartition."

Related chapters

8. Socrates: sources and interpretations
9. Reading Plato
13. Plato on virtue and the good life
14. Plato: philosopher-rulers
21. Aristotle: psychology
24. Aristotle on the good life

13
PLATO ON VIRTUE AND THE GOOD LIFE

Frisbee C. C. Sheffield

Plato's ethical thought is everywhere in the dialogues. Discussions about the nature of the soul, how it comes to know the world, and the nature of the world in which it is a part, all ultimately serve an ethical agenda. For what we think about ourselves, and our relationship to the world of which we are a part, has a bearing on how we think it best for us to be and act in the world. In contrast to the speculations of the natural philosophers before him, Plato's philosophical investigations are tethered to questions about the good life. This practical orientation of Plato's philosophy can be traced back to Socrates, for whom the central question of philosophy was: how should I live?

Socrates' influence was profound. This emerges in part from a contrast Plato draws in the dialogues between Socrates and the Sophists (or interlocutors whose influence by the Sophists is strongly felt) and which so often frames the ethical discussions (see Notomi, this volume). The Sophists were professional teachers of excellence, or success. In the political climate of fifth century Greece, where debating, speechmaking, and eulogizing were central to public success, their teaching of rhetoric was particularly prized. For Plato, however, this devotion to rhetoric inclined one towards the wrong sorts of values: political domination and pleasure-seeking (*Gorgias*). Furthermore, when allowed to float free from reflection on the value and truth of what is said, the teaching of rhetoric fostered skepticism about values. Plato's concern to rebut skeptical challenges in the dialogues (for example, *Republic* Book 1) and anchor the ideals of justice, for example, on secure foundations, is one way in which this Sophistic influence can be seen in the dialogues. Contrasted with this concern with public success in the assembly and the law-courts is the deflationary, conversational tone of Socrates, urging individuals to engage in reasoned argument and critical self-examination in the pursuit of objective ethical truths. Plato's Socrates encourages the young to turn away from a concern with public success to focus on the inner life, or the "care of the soul" (*Apology* 29e). The extent to which this contrast is historically grounded is not clear, since for many at the time Socrates was associated with the Sophists and charged with corrupting the young (see Bryan, this volume). For Plato, however, the two could not be more different, and delineating the differences between Socrates and the Sophists is one of the ways in which Plato marked out his distinctive ethical territory and characterized the nature and importance of philosophy itself.

Plato's vivid portrayal of the life and character of Socrates has much to contribute to the ethical discussions of the dialogues. His character and behavior in argument

embody many of the ideals discussed in the works themselves, and his life is used to lend dramatic urgency to the ethical debates therein. Socrates explores the nature of piety on the steps of the courthouse where he faces charges of impiety (*Euthyphro*), the justice of the laws when he obeys their dictates to stay and die, rather than escape into exile (*Crito*), and he engages in detailed arguments about the immortality of the soul while on the point of drinking the hemlock that will end his life (*Phaedo*). Such details are not inconsequential. Ethical discussion takes place between richly developed characters, embedded in a range of vivid social contexts because the good life for Plato is about character and lives. The ultimate question is always: how shall I live? And the answer is to be found not so much in abstract rules of moral reasoning, but in the cultivation of a certain kind of character and life (Amas 1993).

Desire, Eudaimonia, and the Highest Good

Though the dialogue form does not make it easy to construct a clear and consistent Platonic view (see Long, this volume), it is possible to clarify some recurring ethical preoccupations, if not doctrines, and to highlight some of the salient considerations that motivate the arguments for these concerns. Quite often in the dialogues, questions about the good life involve reflection on what it means to be and act as a human being. Plato's ethical thinking is grounded in an account of human nature, its deepest concerns, and how leading a good life, correctly understood, can satisfy them.

Human beings are aspirational creatures, for Plato; it is part of what it is to be a human being that we are subject to desire. We straddle a divide between a transient mortal world of change, ignorance, and suffering, where our grip on things of value is a tenuous one, and a divine state of stability, perfection, and happiness, to which we aspire. Unlike the gods, who possess all good things, and exist in a state of perfect flourishing, human beings are deficient and needy creatures, who desire those good things they lack, and have to strive to create a good, and "god-like," life, however conceived (for example, *Symposium* 207–8). Sometimes in the dialogues Plato even talks as if we once existed in a god-like state of perfection and happiness, and that we will never be complete, whole, and happy again until we find a way to return to it. Achieving the perfection, self-sufficiency, and happiness definitive of the divine nature—"becoming like god" (*homoiōsis theōi*) to the extent possible for human beings—was often how Plato described the goal of the good life (for example, *Timaeus* 90c–d, *Symp.* 207d1; cf. *Phaedrus* 252c–253c, *Theaetetus* 176a5–c3, with Sedley 1999). Since the gods are characterized by their supreme goodness and flourishing, an account of the divine nature often emerges together with an account of the good life for human beings (though the inclusion of pleasure as part of the human good in the *Philebus* makes this more difficult).

Desire is fundamental to our nature, and many of Plato's arguments for the good life consider what human beings desire, why it is desired, and whether it is worthy of such focus (for example, *Gorgias*, *Symposium*, *Republic*, *Phaedrus*). For Plato, desires respond to value in the world, and as such orientate us towards what we consider to be worthy of desire and pursuit (though they do not always pick out what is genuinely, as opposed to merely apparently, desirable). To the extent that desires indicate where we see value they can be subject to rational reflection about what we consider important in our lives, and how we conceive of living well. Not all desires can be subject to such reflection, of course. At least in some works Plato entertains basic appetites which, though also part of human nature, can, at best, be managed; but there are other desires which are revela-

tory of our deepest values and concerns, for goals upon which we can reflect and which are sensitive to considerations of value. What we care about is a crucial part of who we are and shapes the course and nature of our lives. It is one of the virtues of Plato's ethics that his accounts of the human good incorporate reflection upon the most fundamental desires of human nature. In so doing Plato lays the foundations for connecting his ethical ideals with our deepest concerns.

The *Symposium* provides one of Plato's most explicit accounts of what was later to be known as the *telos* (Greek for "end"), or *summum bonum* (Latin for "highest good") of human life. It does so by reflecting on the nature and aims of passionate desire (*erōs*). It begins with the observation that this desire to which we are all, as human beings, subject, occurs for the sake of something (*Symp.* 204d). When we consider what it is that we desire (for example, sex, money, or conversation), we can also consider how our desires relate to further ends (the pursuit of pleasure, or knowledge, say) and thereby discover what really matters to us. Reflection shows that we typically desire things we think will lead to some good, or benefit for us, and this is because we think such things will ultimately bring us happiness (*eudaimonia*). This is postulated as the ultimate goal (the *telos*) of human desire because:

> One no longer needs to go on to ask "And what reason does the person who wishes to be happy have for wishing it?" Your answer seems to be complete.
> (*Symp.* 205a2–3; trans. Rowe.)

Happiness is the end of human desire, because unlike other desirable ends, no one would ask why one wants to achieve it. The notion that happiness is desired as the end (*telos*) of all rational acts and that they relate to a single ultimate end we all share, namely happiness, which is the good, is a fundamental assumption in many dialogues (See, for example, *Gorgias* 466a, 468e; *Meno* 77a–b; *Euthydemus* 278e–282c, 288c–292e; cf. *Lysis* 219c–220b, 216d–217a, 221b–222a). The task is to give an account of happiness. This is understood in terms of specifying what makes life "worth living," as Plato sometimes puts it (for example, *Symp.* 211d), as opposed to identifying something that makes us feel good about our lives. What makes a life worthwhile may well be something one feels good about, but its worth is something that can be determined from the outside, so to speak, and assessed in terms of the value of its central objects. It is to capture this objective sense that *eudaimonia* is often translated as "flourishing."

What we ultimately want as desiring agents is possession of the sort of good, or goods, that will satisfy this desire for happiness (*Euthydemus* 279ff., *Gorgias* 478ff., *Symposium* 202c; *Philebus* 11d). In assessing candidates Plato is reflecting upon whether it is reasonable for us to desire them, where this can be assessed independently of a given agent's happening to care about them. Arguments are presented against those who think that living well consists in the satisfaction of whatever appetites one happens to have (for example, *Gorgias* 491e8–492a3). The search is for what is really (and not just apparently) desirable for human beings, and this is one of the reasons why Plato's *eudaimonism* is unlike desire-satisfaction theories. It is also one of the reasons why Plato's ethics hinges on questions about the nature and status of goods, some of which lead to metaphysical speculations about where value really resides in the world (see Silverman, this volume). The highest good is not simply an object of inclination and, whatever it turns out to be, it will provide reasons for action independently of whether it is desired. An agent has reason to pursue a certain good or certain goods because it is or they are supremely valuable (for

example, *Symposium* 211d), and because we are the kind of beings for whom certain kinds of goods (for example, wisdom, or justice) are beneficial (*Republic* 445a–b).

There are numerous questions to be asked about the notion that *eudaimonia* is the ultimate end of all rational acts (the *eudaimonist axiom*, as it is sometimes called). It is not always clear whether this is a psychological or an ethical notion, or both. That is to say, it is not always certain whether Plato is committed to the view that happiness is not just the ultimate object of desire, but the ultimate good (as in Aristotle: see Scott, this volume). As a psychological thesis the following questions emerge: the idea that we all have a desire for our own happiness and well-being, which is sometimes referred to as *psychological eudaimonism*, dovetails with an intellectualist strain in Plato's ethics, according to which when we go wrong this is not due to a fault in our desires, but in our beliefs, for we all desire the good things that lead to, or constitute, happiness. This view supposes that when we go astray, for example, by choosing an option that leads to misery, not happiness, this is due to a failure to identify correctly the kind of good that will satisfy the desire for happiness. This seems to ignore the fact that people often pursue things that they know are bad for them. When Plato reflects on this phenomenon (for example, *Meno* 77a–b), he presents arguments designed to show that it is, in fact, difficult to find cases where an agent desires something they believe will bring them overall harm and misery, and where the thing in question is still desired as such. When we desire, say, to smoke, we do so not because cigarettes are cancer inducing, and will cause overall misery, but because cigarettes give pleasure, that is, insofar as we think that cigarettes bring us something good. We continue to smoke because we hold certain beliefs about the goodness of doing so. Plato encourages reflection upon the fact that we often ignore (deliberately or otherwise) aspects of the desired thing that might cause harm. If so, such cases are not counter-examples to psychological *eudaimonism*, and they give greater clout to the ethical project of ensuring that we have the right beliefs about what sorts of things really will benefit us. For further discussion of this issue see Doyle, this volume.

In some dialogues, it is not clear whether the claim is that *all* desire functions with some good as an end in view, which might seem implausible, given the range of desires to which an agent can be subject; or whether the arguments revolve around the weaker claim that we all have a desire for our own good and happiness and not that this is the *only* desire that we have. Desires that involve considering the value of their objects, and how they might contribute to happiness, are often termed "rational desires," but in dialogues like the *Republic* Plato considers desires that operate independently of thoughts about the agent's overall good. This has a significant impact on the account of the good life. For if wrong action is solely due to incorrect belief, then the ethical task consists in greater rational reflection; if wrong action can also be due to irrational desires, then the approach will be different. Leading a good life will require an agent to educate, or habituate, non-rational aspects of the soul in a manner described in *Republic* Books 2 and 3. Though acknowledging the reality of non-rational desires alters the account of how the good life is achieved, Plato never drops the claim that *eudaimonia* is the ultimate object of rational—if not all—desire.

The *eudaimonist* axiom is sometimes connected to a notion of the highest good—indeed, *eudaimonia* is sometimes specified as the highest good, the *telos* (*Symposium* 205a; cf. *Timaeus* 90d, *Philebus* 20bff. with 11d4–6). This suggests that *eudaimonia* also functions as a substantive ethical notion. It is not always clear how it does so, however. In the *Symposium* the notion of a *telos* of desire helps us to think about which things are genuinely valuable goods. Whatever the highest good turns out to be, it will have to

be the kind of good we desire for its own sake, and not instrumentally—for the sake of any further, higher, good; it is a final end. The notion of a *telos* is sometimes connected to the formulation of a hierarchy of good things we desire, and the idea of "that for the sake of which" we desire (*Symp.* 211c; cf. *Lysis* 219ff., *Republic* 357b). The ultimate object of desire is that which all other desirable things are desired *for the sake of*; it, by contrast, is valued "for its own sake." Plato sometimes also talks of the *telos* as something that has the source of its value in itself, and not in some further object, that is to say that the goodness of the thing is intrinsic to its nature, and not provided by an external source (*Symposium* 211c). In the *Symposium* it is also claimed that the kind of good that will satisfy the desire for happiness must be the kind of good that can be had "always" (206a10). The search is for something that makes *life* worth living (211d), and this is evidently not something had in a moment in time. A certain permanence and depth is required for happiness.

It is not immediately obvious why Plato consistently suggests that there is some one good (for example, wisdom, pleasure, honor) we seek as central to the happy life. Perhaps the idea is that when we consider how to lead a happy and flourishing *life*, part of what is under consideration is how we can manage successfully a variety of competing claims on our time and attention, so that our life has a coherent, organized, and focused structure. Without this, it is not easy to manage one's life in such a way that one can flourish and achieve success: this requires a direction or focus (*Gorgias* 506d2–507a7 on the importance of organization in a flourishing life). This is part of what is encapsulated in the search for the *telos*, an end, or purpose, of human life. If the good functions in some such way that need not mean one pursues one good to the exclusion of all others; rather, this good will be the value one prioritizes, and which one uses to adjudicate competing claims on one's time and attention. Socrates may still attend social gatherings such as symposia, as long as they involve intellectual discussion, though he may arrive late if contemplation is required along the way (*Symposium* 174d). It remains a controversial question just how Plato conceives of the highest good, and what relationship it has to other good things in a life worth living (Broadie 2005).

The inquiry into what sort of life is happy (*eudaimōn*) is often put as a question about what sort of life is excellent (*Gorg.* 492c5–6; cf. *Euthydemus* 282e). The fact that the dialogues operate within a framework that assumes a connection between *aretē*—excellence, or virtue—and happiness tells us something about the notion of *aretē*. Though *aretē* includes things we tend to think of as virtues, for example, courage, justice, and so on, it also includes qualities not always considered virtues by us (and omits things one might categorize as virtues, for example, modesty). When Meno defines *aretē* as the power to acquire goods such as wealth and influence (*Meno* 77–78b, which occurs in the *Euthydemus* as a popular conception of happiness), he does not have specifically *moral* goods in mind. Meno is thinking about what is good for the agent concerned, where this is understood as something that will make him excellent, or successful (cf. *Euthydemus* 279a–b; *Meno* 87e; *Chrm.* 160e–161a, 175d–176a; *Laches* 192c–d). The search for excellence is not, at least primarily, or in the first instance, a search for moral, or altruistic, virtue, but a search to find out how to live well, and flourish as a human being. When Plato goes on to make substantive philosophical points about the relationship between virtue and happiness, these are made within a framework that already accepts that there is a relationship between *aretē* and living well. The issues arise when one tries to clarify the nature of *aretē*, confusion about which is the central problem of the so-called dialogues of definition (on which, see Woolf, this volume).

Investigating the excellence or success of human beings involves reflection upon the kind of beings that humans are, or the nature of the human soul. We are beings who possess, to a greater or lesser extent, rational capabilities (for example, *Alcibiades* 1 128–30) and as such we are capable of reflection upon our lives. The centrality of reason receives a different emphasis depending on the conception of human nature in focus in any given dialogue. If human beings are conceived of as essentially rational, for example, then our virtue, or excellence, will reside in some kind of perfected rational activity (for example, knowing of a certain sort). If human agents are considered as complex wholes—with reason competing with other desires and drives—then virtue will reside in the successful organization of other desires in accordance with the goals of reason. Whatever the details of Plato's accounts, reason remains central to his conception of what a human being is, and so his conception of what makes an excellent, or virtuous, human agent, often requires specification of the kind of rational activity involved (for example, in the central books of the *Republic*). When reason functions excellently, it has knowledge; knowledge, then, becomes as central to Plato's ethical framework as the key notions of virtue and happiness.

Virtue and knowledge

This is borne out in Socrates' famous insistence that the unexamined life is not worth living. Socrates claims that his fellow Athenians should be ashamed to neglect "wisdom and truth" and the "best possible state of the soul" (*Ap.* 29d–e). The best possible state of the soul—its excellence or virtue—depends on "wisdom and truth." The notion that the good life is a matter of knowing what is good is one Plato explores throughout the dialogues, though it receives different treatments in different works. There are arguments for the claim that virtue requires knowledge, and stronger arguments for the claim that virtue *is* knowledge (*Meno* 87c–89a), which in turn leads to a thesis known as "the unity of the virtues"; for if virtue is knowledge, then one possibility is that the various names given to the separate virtues are different names of one and the same thing (*Protagoras* 331e4–6; 359b6–7; 361a6–b3). Courage, for example, requires knowledge of what is and is not to be feared; without knowledge one is not courageous but a daredevil (or a coward). Or, as the *Laches* puts it, enduring *when it is wise to do so* is courage (192d). Unifying the virtues under a single state captures the idea that there is something from which the various virtues arise—some kind of state or disposition of character, manifested in a variety of ways. Since all the virtues seem to some extent to involve a grasp of what is good to do in a given situation, it is reasonable to suppose that this will be, or involve, knowledge. Further, we might quite plausibly think (along with Plato and Aristotle) that being a good person is not just a matter of doing certain actions. A good person is someone who has some secure grasp of what she is doing when she does the right thing, and this ensures that good actions are performed willingly and consistently.

The nature and precise role of knowledge is controversial, however. An argument for the importance of knowledge for virtue appears in the *Euthydemus* (278e–282a). It begins with the familiar assumption that we all want to do well (278e) and achieve happiness (280b), and that we will be happy and do well if we possess good things. Socrates lists possible candidates: wealth, health, good looks, honors, and so on, followed by more specifically psychic goods such as temperance, justice, bravery, and wisdom. Reflecting on such goods leads to the observation that happiness does not consist simply

in the *possession* of good things, for a person may possess, but not use, good things and so not benefit from them. Happiness consists in the *use* of good things. Since things can be used well or badly, and when used badly cause harm, happiness must reside in the *correct* use of good things. One can use wealth, for example, for evil ends, in a way that causes overall harm:

> With regard to using the goods we mentioned first—wealth, health and beauty—was it knowledge that ruled and directed our conduct in relation to the right use of all such things as these, or some other thing?
>
> It was knowledge.
>
> Then knowledge seems to provide men not only with good fortune but also with good action, in every case of possession or action.
>
> … Then is there any advantage in other possessions without good sense and wisdom?
>
> … To sum up, Cleinias, it seems likely that with respect to all the things we called good in the beginning, the correct account is not that in themselves they are good by nature, but rather as follows: if ignorance controls them, they are greater evils than their opposites, to the extent that they are capable of complying with a bad master; but if good sense and wisdom are in control, they are greater goods. In themselves, however, neither sort is of any value.
>
> (281a6–b6; trans. Sprague with modifications)

So, many so-called "goods" are dependent for their goodness on knowledge; this is what makes them good (280c–281e). Wealth and power, for example, can cause harm if employed with ignorance (281c). In this way, knowledge determines happiness:

> Since all of us desire to be happy, and since we appear to become so by using things, and using them rightly, and since knowledge is what provides this goodness of use and also good fortune, every man must, as seems plausible, prepare himself by every means for this: to be as wise as possible. Right?
>
> (281e2–282a6)

If we agree, then the focus for a happy life, the value to prioritize in the structure of our lives, should be the knowledge that delivers virtue.

Plato remains probing and elusive when it comes to clarifying the nature of this knowledge, however, and Socrates denies that he has any of this knowledge himself time and again in the dialogues. It is suggested that this is knowledge of good and bad (*Laches* 196d–199e; cf. *Charmides* 174b), knowledge of how to live, where this involves knowing how to use, or pursue, other goods properly (*Euthydemus* 281a6–b6, 289b4–6 with c6–8). This seems to require knowing what makes things good, the end to which they should be put, and this requires an account of the good. In the *Republic* Plato develops a teleological theory according to which the Form of the Good is the source of value for all other good things (see Wolfsdorf, this volume). Knowing this form enables us to explain how, and why, things are good, in such a way that we can use goods effectively, and be consistent and certain, in their use (Denyer 2007).

In the *Euthydemus* we are told that knowledge is good "by its very nature" (281d8), whereas other things depend on knowledge for their goodness. Knowledge is an intrinsic good because it does not depend on anything else for its goodness, it is itself the source

of value (or goodness), whereas other goods are extrinsic goods because the source of their value resides elsewhere: in correct use guided by knowledge. So knowledge has a privileged status; it is the only intrinsic or unconditional good (281e4–5). It is not clear how strongly to take this claim. Is the claim that other things are goods when used with knowledge, and that knowledge is the only thing that is good *all by itself*? Or is it the stronger view: that other things are not, in fact, goods; goodness resides in the correct use—that is, some kind of knowledge—and not to the "goods" themselves? If so, the conclusion indicates that knowledge is the *only* good and nothing else is a good.

At stake here is a possible distinction between intellectual, or contemplative, knowledge and practical knowledge which the Platonic dialogues elide, but which manifests itself as problematic in Aristotle's *Nicomachean Ethics*. Also at stake is the relationship between virtue and happiness (see Vlastos 1999). For if excellence resides in knowledge, is this necessary and sufficient for happiness? The concluding remark that we should pursue knowledge because "it is the only thing that makes a human being happy and fortunate" (282c9–d1) suggests as much, but just because we will fare better with knowledge, this is not enough to show that it is sufficient for happiness. The possession of other things (which we need to use correctly) may also be a decisive factor, along with other external conditions (health, for example: 281d6–7). When it is argued that one needs nothing else for success (*Euthd.* 280b2–3), this suggests that the exercise of knowledge itself is constitutive of excellence, and not just the cause of it; nothing further is required. How could this be? There seems to be a tension between the idea that virtue is some kind of skill of using other things and so the cause of excellence, and the idea that it is constitutive of it (Annas 1993). The notion of a skill or craft looms large in the *Euthydemus*. Socrates appears to be considering the kind of skill an expert would have, like an expert carpenter, for example. We have virtue when we know how to use goods to bring some benefit. If one has knowledge of how to live well, then one knows how to use wealth for beneficial ends such as health and security, as well as, perhaps, the opposites of these. If using knowledge is like carpentry, where tools are used so as to bring about a certain result, this suggests that wisdom, too, will have a product outside of itself.

If correct use is knowledge, which "leads and directs" behavior, this does not necessarily imply that virtue is all about behavior expressed in action (some productive result). It is clearly the case in some dialogues that wisdom is valued for its own sake—as a constitutive part of excellence—though it may also be valued for the sake of its results. As Plato indicates elsewhere one can value something for its own sake, and for the sake of the results it produces (*Republic* 357bf.). But how might wisdom be valued as a constitutive part of excellence? A variety of (compatible) positions are explored in the dialogues. Socrates sometimes talks as if cultivating knowledge and virtue constitutes the care of the soul. We will fare well—be happy—if we cultivate wisdom and excellence because it is the good condition of the soul and constitutes its flourishing. There is also a theoretical working of this idea, whereby the emphasis falls on the knowing itself, on contemplation of the source of value (that is, the relevant forms). The contemplative ideal comes to the fore in dialogues like the *Symposium*, and the *Phaedo*, and certain passages in the *Republic*, where it seems to be the constitutive excellence of the human soul, and something "god-like." Plato seems to waver between the two positions: on the one hand, reason is a necessary condition of good action; on the other, the good life is somehow constituted by a life of rational activity. On the necessary condition view, he leaves more room for an emphasis on the dispositional aspects of behavior. This is highlighted as required for

the possession of virtue in the *Republic*, where Plato devotes two books to techniques for acquiring the disposition to act in the right way. The sufficiency view came to prominence with the Stoics (on which see Bénatouïl, this volume), and the later Platonists (on which see Karamanolis and Opsomer, this volume), but the seeds of this idea can be found in the Platonic dialogues. It is sometimes held that the difference between these two positions reflects a tension between the historical Socrates whose views seem better reflected in dialogues like the *Protagoras*, and a later Plato (on which see Bryan, this volume). This tension can also be seen in Aristotle's accounts of *eudaimonia* in Books 1 and 10 of his *Nicomachean Ethics* (on which see Scott, this volume).

Virtue and the condition of the soul

Though knowledge remains central to the accounts of virtue and happiness in the dialogues, the *Republic* provides a more nuanced account of its role in the good life. In the *Republic*, a certain psychological structure in which rational desires interact effectively with those of spirit and appetite is crucial for virtue. Some argue that this marks a shift away from the earlier intellectualist account of virtue which is strongly associated with the historical Socrates, but the details do not always bear this out. How plausible one finds this view depends on how strongly one interprets the intellectualism of those earlier dialogues, and how one interprets the role of knowledge in the development of this psychic structure in the *Republic*.

One novel feature of the account of how virtue is achieved is the emphasis on prerational cultivation of the right habits and dispositions. From youth one learns to appreciate and enjoy the rhythms of rationality, embodied in a variety of things (for example, harmonic structures in music), so that one can mould one's soul in the proper (rational) way before one is capable of understanding *why* this is a good thing to do. This encourages receptivity to rationality in its more intelligible forms, which will be required for virtue proper. New, too, is a more detailed account of the specific virtues. Self-control is a "certain ordering and mastery of pleasures and appetites" (430e). Justice is the state in which each part of the soul plays a role in the best structure. Wisdom is the care of the intellect for the whole (441d–e). Courage is the maintaining, by the spirited part of the soul, of instructions from the intellect about what is to be feared and what not, despite pleasures and pains. The focus here is on our nature as composite wholes: the soul has parts and relations between them constitute its virtues (435b–c). Virtue is the psychic health of a human being considered as a whole human being, and the virtuous are happy because they live the life of integrated and flourishing human beings, where rational and non-rational desires function as a harmonious and orderly unity. Psychic strife is psychic deterioration, and:

> even if one has every kind of food and drink, lots of money, and every sort of power to rule, life is thought to be not worth living when the body's nature is ruined. So even if someone can do whatever he wishes, except what will free him from vice and injustice and make him acquire justice and virtue, how can life be worth living when his soul—the very thing by which he lives, is ruined and in turmoil?
>
> (445a–b trans. G. M. A. Grube)

Life with a defective body is not worth living (*Crito* 47d–e, *Grg.* 505a, 512a), and the same holds true *a fortiori* for the soul.

The claim that the virtue of justice, which is that state of psychic harmony, is psychic health, is supposed to answer a challenge posed at the start of the dialogue to show that justice is in itself beneficial to the agent, rather than simply an other-directed good (343c). The argument is designed to show that justice is valuable "for its own sake," regardless of its consequences, and so those who are just fare better than those who are not. The argument has seemed weak. It seems as if Plato has changed the subject, since the concern was to show that it was in an agent's own interest to refrain from unjust *behavior*, and the above forms part of an argument which shows that it is in an agent's own interest to have a just *soul* (Sachs 1963). Just actions are those that promote and preserve a certain condition of the soul (443c–e). Plato is consistently focused on the condition of the soul, and the development of a certain sort of character for the virtuous agent, and not (primarily at least) on specific good actions. Actions depend on psychic states, on character, for their value. If so, can Plato bridge the apparent gap in his account between behavior and psychic states?

There is considerable debate about this issue. The following considerations may be helpful. It is claimed that the person with a well-ordered soul will not rob, steal, be adulterous, and so on (442e–443a). The cause of this is that "every part within him does its own work, whether it's ruling or being ruled" (443b1–2). Though one might imagine a rational, controlled agent who commits acts of injustice, the educational training productive of this state provides a possible explanation of why he will refrain. Someone subject to the education and training provided by the ideal city has the appropriate psychological condition (442a–d). Those educated in the right kinds of poetry and music, which encourage piety and friendship, for example (386a), courage in the face of adversity and danger (386a–389d), and temperance (389d–392a), will have no desire to engage in acts of injustice. They are educated to refrain from the very acts of injustice at issue. What Socrates' further arguments provide, perhaps, is an account of *why* it is in their interest to have done so, but that they will so refrain is in large part explained by the education which has trained their affections and appetites in the appropriate way (Burnyeat 2013).

Some have suggested that the integration of non-rational desires in the account of virtue moves Plato towards an Aristotelian model where the virtues consist in harmonizing affective responses with reason, produced by pre-rational training of non-rational elements in the soul (see Scott, this volume), although it is not clear how far Plato has shifted from those dialogues that upheld the unity of virtue in knowledge. As Taylor (1998) argues, the same psychological state is manifested in all the virtues, and knowledge is responsible for creating this state. An agent is just if he has an ordered soul, if each of the three parts does its own thing. This requires the rational part to exercise control. So, the just person is someone who has rational control over other (non-rational) motivational states. For some scholars what it is to have such rational control is to have knowledge of what is just, though for others the relationship to knowledge will be more indirect; rational control can be had by living in a state which reflects this knowledge in its laws and practices, and by participating in its training and following those laws.

Elitism and the scope of virtue

At stake here is the accessibility of virtue. If Plato remains committed to the idea that knowledge is required for virtue, does this restrict its possession to an elite, philosophical,

circle? In the *Meno* Socrates claims that he has never met anyone who knows what virtue is (71b–c), and his own disclaimers of knowledge are rife in the dialogues (*Ap.* 21b–22e, 23a; *Meno* 70b–71a; *Laches* 200e–201a). If he, and everyone else he has ever met, is not wise, then it seems to follow—from the centrality of knowledge for virtue—that he is not virtuous.

Plato sometimes makes a distinction between ordinary, or popular, virtue and virtue proper. The former amounts to behaving in the appropriate way, as a good citizen, so to speak, but without insight (*Phaedo* 82a10f., *Republic* 619c7f.). The philosopher rulers in the *Republic* (on which see Kamtekar, this volume) are described as craftsmen of "ordinary" (demotic) virtue (500d9), so there must be some kind of virtue possessed by non-philosophers, though its status is a matter of dispute. All of the virtues have some connection to reason, but there appear to be weaker and stronger ways in which reason is manifested. For non-philosophers in possession of courage, the guidance of reason is preserved, and they act on the basis of true beliefs about what is and is not to be feared, but they do not have knowledge of the Good itself. This suggests that an agent can have a harmoniously ordered soul, by having reason in charge, even if the agent in question is not in possession of full knowledge, and even if the dictates one is preserving do not issue from one's own reason, but that of an external agent: the wise philosopher king (590d5 with Wilberding 2009).

Virtue requires more than obedience, however. Those who act virtuously must be guided by the right reasons, and appreciate the value of the objects of their choice, even if they do not grasp the source and nature of that value, or could not explain the reasons for so acting themselves. We learn more about this issue in the *Laws*, though it is not clear whether this work elaborates a discussion about ordinary virtue from earlier works, or innovates. The suggestive remarks in the *Republic* on the nature of ordinary, or civic, as opposed to philosophical, virtue, can certainly be seen to be continuous with more explicit remarks about the inculcation of virtue in those without fully developed reason in the *Laws* (Kraut 2010). It remains, though, a controversial issue just how one understands the nature of ordinary, civic virtue. What is clear is that a virtuous agent must care about the right things (hence the importance of training desires, and the education in pleasure and pain at the start of the *Laws*), and possess some grasp that enables her both to act correctly and capably in relation to those things, and to do so for the right reasons. In the *Republic* it is argued that many people believe the only reasons to be virtuous are those that make reference to the external rewards that justice, say, can bring (for example, a good reputation). One of the ways in which a genuinely virtuous agent differs is because she has some grasp of what makes the action a fine one and she desires to perform the action for that reason—because it is fine. This is partly inculcated in education, and in the "preambles" to laws that explain why the law is required so that the citizens will be persuaded to accept it (*Laws* 721b–d). The lawgiver is likened to a doctor who converses with his patient and "uses arguments close to philosophizing"; he educates and informs his patient about the cure, so that the patient understands why he should accept it willingly (*Laws* 857c7–e8). This enables those following the law to do so because of some grasp of its value. Knowledge remains central to Plato's accounts of virtue for philosopher kings (who have it), philosophers (who pursue it), and non-philosophers (where education, or preambles to laws, develop an ability to grasp to some extent the right reasons for their actions).

Reason, order and cosmos in the late dialogues

The notion that the good life is somehow a matter of knowing what is good is a persistent theme, though it receives more nuanced acceptance in later works. This is partly due to new metaphysical and cosmological speculations in dialogues like the *Philebus* and the *Timaeus*. In these works the focus is on the role of reason in bringing about order, limit, and goodness, something that can be seen in the orderliness of the cosmos at large, and the human soul (*Philebus* 29a–30b). This is developed at length in the cosmology of the *Timaeus*, which explores how an intelligent cause (God) brought order, proportion, and intelligence to chaotic matter (see Mason, this volume). The orderly motions of the planets, the simple bodies, and the human body itself, are used to show that everywhere there is rational order that works for the best. The upshot is that if one wants to organize one's life for the best, one should conduct one's life in a way that embodies reason. We are urged to contemplate the organization and harmonious proportions of the cosmos and to use them to restore the rhythms of rationality proper to the human soul (90d). In this way the proto-physics of the *Timaeus* reinforces the ethical arguments of other dialogues.

Eudaimonism and concern for others

The contemplative ideal comes to the fore in certain dialogues (for example, *Timaeus*), and scholars remain divided on whether, and how, other-regarding virtue is integrated in the *eudaimōn* life. Even if one does successfully integrate other-regarding virtue into the account of *eudaimonia*, by arguing (as some scholars do) that it is the task of God, and god-like contemplative beings, to aim not just at knowing but at ordering things for the best, it is not clear that this would amount to other-regarding virtue; it could suggest only that one brings order to one's own embodied soul. And even if the rational, virtuous, agent does concern himself with the affairs of others, one wants to know *why*, that is, whether Plato considered the possibility that we could be motivated by the good of others, independently of considerations about one's own good.

If the central question posed by Plato remained the practical one about how best to live my life, then any answer is going to be one that makes the agent leading that life central; concern for others will be seen in terms of the agent whose flourishing is under consideration. Plato's approaches to that question consistently suggest that living our lives in a way in which reason is the central value is a condition of a good and happy human life. Insofar as we are rational agents concerned with our own happiness, we should act in such a way that reason will be exhibited and promoted. This requires further specification, however. It might well be the case that acting in such a way that reason will be exhibited and promoted involves, or even requires, doing good things for other persons. The idea that the virtues, and the rational life which lead to or constitute them, benefit the agent does not in itself show that they are self-serving, or that one aims at one's own interests at the expense of others (Annas 1993).

Plato is concerned to work out theoretically, and to exemplify dramatically, interpersonal relationships that show that he considered it to be part of leading a good and rational life that one cares for the good of others. Love and friendship (*philia*) play a central role in his ethics (*Symposium* and *Phaedrus*) and in fostering the bonds of community required for the city in his politics (*Republic* and *Laws*). In the *Phaedrus* the account of the best philosophical life is one that culminates in a description of a life-long friend-

ship (256a–b). Philosophically inclined characters are uniquely placed to promote the good of others. As someone who values reason and sees its proper place in the good life, the philosophical character can appreciate the beauty of reason in another, which is to value the other for their own sake, that is for who they are. Further, he values the other in the proper way, namely in a way that promotes the good of another. The other is treated not as an instrument of pleasure or utility, but as someone whose psychic beauty is "god-like" (252e1) and, as such, worthy of cultivation and promotion in a philosophical life. The philosophical character acts to promote the good nature of another (252e), without envy (253b7) in a lifelong search for wisdom. In an equal and reciprocal friendship mutual devotion to the good philosophical nature of the other benefits both. For when both parties are of good character neither begrudges the other benefits (253b7, cf. 232d7); "none that is good is ever grudging" (*Ti.* 29e1–3, cf. *Phdr.* 247a7). This is one way in which the goodness of a Platonic agent promotes the interests of others.

Other-directed concerns are not considered in isolation from their contribution to the agent himself. Promoting the good nature of the other in a life structured by shared thought and discussion also benefits the agent himself; he comes to see the value of his own life more clearly, as he explores and promotes the good nature of a like-minded friend (253a). But the self-interest in question is highly specific. The good person is for Plato the supremely rational person. And for the rational person to act for the sake of his own interests is for him to act from a rational desire, which is to say that he acts for the sake of a rationally grounded orientation towards things of real value, whose value rests on reasons independent of the fact that he desires them. Egoism is mitigated because it is underpinned by this broader commitment. And this is the very same commitment that leads to the valuation of others in the proper way, and thereby encourages a harmonious blend of reason and love in the good life.

References and further reading

Annas, J. (1993), *The Morality of Happiness*, Oxford: Oxford University Press.

Annas, J. (2010), "Virtue and Law in Plato", in C. Bobonich (ed.) (2010): 71–92.

Bobonich, C. (2010), *Plato's Laws: A Critical Guide*, Cambridge: Cambridge University Press.

Broadie, S. (2005), "On the Idea of the *Summum Bonum*", in C. Gill (ed.) *Virtue, Norms, and Objectivity, Issues in Ancient and Modern Ethics*, Oxford: Oxford University Press: 41–58.

Burnyeat, M. F. (2013), "Justice Writ Large and Small in *Republic* IV", in V. Harte and M. Lane (eds.) *Politeia in Greek and Roman Philosophy*, Cambridge: Cambridge University Press: 212–30.

Denyer, N. (2007), "The Form of the Good in Plato's *Republic*", in G. Ferrari (ed.) (2007): 284–309.

Ferrari, G. (ed.) (2007), *The Cambridge Companion to Plato's Republic*, Cambridge: Cambridge University Press.

Fine, G. (ed.) (1999), *Plato, Volume 2: Ethics, Politics, Religion, and the Soul*, Oxford: Oxford University Press.

Gill, C. (ed.) (2005) *Virtue, Norms and Objectivity*, Oxford: Oxford University Press.

Irwin, T. (1995) *Plato's Ethics*, Oxford: Oxford University Press.

Irwin, T. (1998), "Kant's Criticisms of Ancient *Eudaimonism*", in J. Whiting (ed.) (1998): 63–101.

Kosman, L. A. (1976) "Platonic Love" in W. H. K. Weikmeister (ed.) *Facets of Plato's Philosophy*, Assen: Van Gorcum: 53–69.

Kraut, R. (ed.) (1997) *Plato's Republic: Critical Essays*, Lanham, Boulder, New York, Oxford: Rowman and Littlefield.

Kraut, R. (2010), "Ordinary Virtue from the *Phaedo* to the *Laws*" in C. Bobonich (ed.) (2010): 51–71.

Nehamas, A. (1999) *The Virtues of Authenticity: Essays on Socrates and Plato*, Princeton, NJ: Princeton University Press.

Prior, W. (2001), "*Eudaimonism* and Virtue", *The Journal of Value Inquiry* 35: 325–342.

Sedley, D. (1999), "On the Ideal of Godlikeness", in G. Fine (ed.) (1999): 309–329.

Sheffield, F. C. C. (2006) *Plato's Symposium: The Ethics of Desire*, Oxford: Oxford University Press.
Sheffield, F. C. C. (2011) "Beyond *Eros*: Friendship in the *Phaedrus*", *Proceedings of the Aristotelian Society*, 111: 251–275.
Taylor, C. (1998), "Platonic Ethics", in S. Everson (ed.). *Ethics: Companions to Ancient Thought 4*, Cambridge: Cambridge University Press: 49–77.
Vlastos, G. (1999), "Happiness and Virtue in Socrates' Moral Theory", in G. Fine (ed.) (1999): 105–137.
Whiting, J. and S. Engstrom (eds.) (1998), *Aristotle, Kant and the Stoics: Rethinking Happiness and Duty*, Cambridge: Cambridge University Press.
Wilberding, J, (2009), "Plato's Two Forms of Second-Best Morality", *Philosophical Review*, Vol. 118: 351–374.

Related chapters

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9. Reading Plato
12. Plato: moral psychology
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14
PLATO: PHILOSOPHER-RULERS

Rachana Kamtekar

1 Introduction: Why philosopher-rulers?

Plato is famous for the view that philosophers ought to rule and rulers ought to be philosophers (*Republic* 473c). Socrates introduces philosophers' rule as the condition which could bring about a city most like the just and happy city he describes in the *Republic* (472e–473e). Yet he worries the idea will earn him ridicule and contempt (473c–e). He seems to think the problem is to explain who philosophers are (474b)—to distinguish them from other intellectuals, perhaps, or those trained by sophists—and to explain the recondite knowledge that they possess and how it qualifies them to rule. Modern commentators have been more concerned that it is not possible for human beings to be so perfect that they can be entrusted with absolute power. According to Karl Popper's (1962: 120–121) influential criticism of Plato's political thought, the real problem is with the question to which philosopher-rulers is Plato's answer: the fundamental question of politics is not, as Plato thought, "who should rule?" but rather, "how should political institutions be designed to minimize the possibility of abuse against individuals?" This chapter asks what led Plato to propose philosopher-rulers in the first place. The hope is that an improved understanding of the motivation for philosopher-rulers will improve our ability to evaluate the idea and to hold on to what is of enduring value in it.

Most accounts of Plato's political philosophy answer these questions by appeal to Plato's experiences of politics: in his lifetime, the democracy illegally tried the generals, who had failed to rescue the survivors of the naval battle of Arginusae, en masse and in absentia (*Apology* 32b); the so-called Thirty Tyrants, who overthrew the democracy and whose numbers included Plato's relatives, acted in flagrant disregard of the law in order to commandeer citizens' property (*Apology* 32c–d, *Seventh Letter* 324b–325a); finally, the restored democracy condemned Socrates to death for impiety and corrupting the Athenian youth (*Apology*, *Seventh Letter* 325b–c). Such events caused Plato to lose hope in existing political structures and to conclude that a just political order would require rule by extraordinary individuals who would be guaranteed to make wise judgments—that is, philosopher-rulers. Plato's later political thought replaces philosopher-rulers by the rule of law and a mixed constitution with extensive checks and balances, either because of his disastrous experience trying to convert Dionysius II, tyrant of Sicily, to philosophy (as recounted in the *Seventh Letter*) or because he began to see the allure of pleasure as so great that he despaired of even philosophers' wisdom guaranteeing moderation in an absolutely powerful ruler (for such an account, see Klosko 2006).

If we are interested in Plato as a political philosopher, however, we will want to see how his views engage with the political thought of his time, rather than how they grow out of his idiosyncratic life-experiences. In this chapter I argue that, like the sophists Protagoras and Gorgias, Socrates is interested in the idea of a political expertise (*politikē technē* or *rhetorikē technē*) that makes its possessor successful in politics, but that unlike these sophists, he thinks there is a problem specifying the content of such an expertise. In Plato's dialogues, Socrates examines the formal features of an expertise, and particularly of an expertise that has the superior status the sophists claim theirs has, to offer a new kind of answer to the traditional question about the best constitution (*politeia*). The traditional debate is conducted in terms of who should rule; Plato effectively changes the subject to, "what should rule?" that is, "given what ruling is *for*, what brings about this end?" "Philosophers' rule" is his answer to this question.

2 Searching for political expertise

In Plato's early dialogues, Socrates specializes in refuting those who claim expertise: for example, showing that Protagoras, who claims to teach political wisdom and virtue, doesn't even know that if virtue is teachable, the virtues must be one in wisdom; and that Gorgias, who claims to teach the skill of speaking persuasively, at first can't say about what subject matter, and when he agrees that it is about matters of justice and injustice, both affirms and denies that he makes his students just. To the extent, however, that Socrates (or Plato) agrees with the sophists that there is some political expertise, he too incurs some responsibility to say what it is (for example, for those who have admitted their ignorance about justice and are now eager to remedy it, cf. *Clitophon* 410b–c). Plato seems to recognize such a responsibility in the *Gorgias* when he has Socrates say that he is one of the only Athenians to take up (*epicheirein*, whose meaning is ambiguously somewhere between "practice" and "attempt") true political expertise (521d). We may begin, then, by asking: what views about political expertise does Plato's Socrates share with the sophists?

The very label, "expertise," implies some things. First, many kinds of expertise improve the materials with which they work to produce some good object—for example, shoemaking turns leather into shoes; medicine heals sick patients. These kinds of expertise not only produce good and useful products, but do so with an understanding, capable of being articulated, of the cause-and-effect relationships that they employ (*Gorgias* 465a). Other types of expertise are not productive, but they nevertheless have a distinctive subject-matter about which they are authoritative: for example, astronomy's subject-matter is the motions of the heavenly bodies (451a–d). So to count as genuine expertise, political expertise must produce something good, and/or be authoritative about some determinate subject-matter. In the *Gorgias*, Socrates proposes that politics, the sub-branches of which are legislation and (corrective) justice, aims at the good of the soul (464b–c), so that the way to evaluate a political leader is by whether he actually makes the citizens as good as possible (513e).

Socrates uses the idea that productive kinds of expertise in general improve their objects to argue against the idea that there could be an expertise aimed at the good of the expert, qua expert. So a ruler who makes laws to his own advantage doesn't do so in virtue of his expertise in ruling, but insofar as he is motivated by his own advantage (*Republic* 341c–342e, cf. *Gorgias* 491d–e). While some of Socrates' interlocutors (for example, Thrasymachus, Callicles) do not welcome this conclusion, Plato treats it as following from the notion of expertise itself.

Second, the good that political expertise produces is somehow all-purpose or global, and so political expertise is especially important to success. Protagoras famously tells Socrates, "What I teach is good deliberation, concerning households, how one might best govern one's household, and concerning the city, how one might be as powerful as possible in the city in both action and speech," and he accepts Socrates' characterization of what he teaches as "political expertise" (*politikē technē*) (*Protagoras* 318e–319a). Later in the dialogue Protagoras owns that it would be shameful for him not to acknowledge that wisdom and knowledge are most powerful of all in human affairs (352d). And Gorgias promises that his rhetorical expertise (*rhetorikē technē*) (449a) produces "freedom for humankind itself and … for each person the source of rule over others in one's own city" (*Gorgias* 452d); one reason is that the orator can persuade people about any subject-matter, whether medicine or harbor-building (455d–56c). (For the similarity/overlap between sophistic and rhetoric see *Gorgias* 465c, 520a–b.) Both claim that their expertise gives its possessor mastery across all different spheres of life. In the *Gorgias*, Socrates rephrases this as the claim that political expertise is a ruling expertise: just as the soul rules the body, politics should rule and use the kinds of expertise that aim at the good of the body (465c–d). He uses this to criticize Callicles' claim that Themistocles, Cimon, Miltiades and Pericles were good politicians (515d, cf. 503a), saying that they were only servants of the citizens, for the walls and shipyards for which they were responsible are the products of the subordinate expertise of the builder, which is to be used by the superordinate expertise of politics, which aims at making the citizens better. When not used by a good-directed expertise, the walls and shipyards and so on serve only to gratify citizens' appetites (517b–c).

Third, expertise provides an immediately plausible answer to the question of who should perform a given task: it should be the one who can do it best, the expert. Socrates uses this answer to undermine claims to rule based on entitlement. (I discuss this in greater depth in Kamtekar 2006.) When Callicles says "I believe that nature itself reveals that it's a just thing for the better man and the more capable man to have a greater share than the worse man and the less capable man," (483d), he is claiming that the superior *deserve* to have political power in virtue of their intrinsic superiority in wisdom and strength (490a); this wisdom and strength make it the case that the superior not only can but should have more than a "fair share" (491e–492c). In response, Socrates challenges him to produce a rational connection between having a ruling-relevant superiority and taking more for oneself of whatever is in the jurisdiction of that superiority.

> Suppose we were assembled together in great numbers in the same place … and we held in common a great supply of food and drink, and suppose we were a motley group, some strong and some weak, but one of us, being a doctor, was more intelligent about these things. He would, very likely, be stronger than some and weaker than others. Now this man, being more intelligent than we are, will certainly be better and superior in these matters? … So should he have a share of this food greater than ours because he's better? Or should he be the one to distribute everything because he's in charge, but not to get a greater share to consume and use up on his own body? … Shouldn't he, instead, have a greater share than some and a lesser one than others, and if he should be the weakest of all, shouldn't the best man have the least share of all …?
>
> (*Gorgias* 490b–c, tr. Zeyl in Cooper and Hutchinson 1997)

There is no rational connection between the knowledge of what and how much food is healthful and the desire to have more food than one's fair share. Medicine provides a standard for the distribution of food; it is health. What expertise prescribes taking more than one's fair share? In the first book of the *Republic* Socrates argues against Thrasymachus that injustice is unlike the expertise in seeking more and more (349b–350c)—presumably rather than seeking the right amount prescribed by expertise.

In *Republic* Book 1, Socrates also uses the idea that each expertise prescribes the "how much and to whom" in its jurisdiction to criticize a conception of justice as distributing goods. When Polemarchus defines justice as "to give to each what is his due or what is appropriate," Socrates argues that the specialized kinds of expertise already do this for the particular goods they produce, challenging Polemarchus to say what distinctive good justice (assuming it is an expertise) distributes. Given that the doctor gives medicine, food and drink to bodies, and the cook gives seasoning to food, he asks: "What will he [viz., the just person] give, and to whom?" (332c–d.) The principle of justice subsequently developed in the *Republic* is one that focuses on the distribution of jobs or duties, rather than goods. Goods are distributed on the principle "to each according to their capacity for benefit," but this is "the aim of the law" rather than a principle of justice (see further Kamtekar 2001), and that the law should have that aim is something Socrates stipulates for his theoretical city in response to Thrasymachus' contention that in every existing constitution, the law serves the interests of the rulers. Socrates does not disagree with Thrasymachus' claim about existing cities, but creates "a city in speech" in which the law serves the interests of the whole city.

Let us return to the view shared by Socrates and the sophists, that there is an expertise of politics. Those who share this view also share a problem. In the case of established expertise, there is a product, and knowing this product enables us to characterize the expertise by which it is produced. In the case of political expertise, there is the question of what the product actually is. When Socrates says in the *Gorgias* that political expertise makes people better, or more virtuous, he says no more than Protagoras does (*Protagoras* 318b, 318e–319a), and he opens himself up to the questions he routinely puts to the sophists: what *is* the goodness or virtue which citizens get as a result of rule by political experts? And what is the intellectual content of the expertise by means of which the expert makes them better?

Socrates owns this problem in the *Euthydemus*. Having argued that everything save knowledge is neither good nor bad in itself, but bad when used ignorantly and good only when used with knowledge, Socrates concludes that this knowledge must be the ruling expertise, and the good it produces cannot be to make citizens free, rich, or without faction (for these conditions are themselves neither good nor bad), but only to make them knowledgeable; but now, if we ask the natural question: "knowledgeable about what?" the natural answer: "knowledgeable about good and bad," is unhelpful, because good and bad just are, respectively, knowledge and ignorance. Yet knowledge and ignorance have to be *of* something.

> It was due to this [viz., the ruling art] that generalship and the others handed over the management of the products of which they themselves were the craftsmen, as if this art alone knew how to use them. It seemed clear to us that this was the art we were looking for, and that it was the cause of right action in the state, and, to use the language of Aeschylus, that this art alone sits at the helm of the state, governing all things, ruling all things, and making all things useful

> … Now … when this [ruling art] rules over all the things in its control—what does it produce? … it certainly must provide us with something good … [but] nothing is good except some sort of knowledge … Then the other results which a person might attribute to the statesman's art—and these, of course, would be numerous, as for instance, making the citizens rich and free and not disturbed by faction—all these appeared to be neither good nor evil; but this art had to make them wise and to provide them with a share of knowledge if it was to be the one that benefited them and made them happy … is [the kingly art] the art which conveys every sort of knowledge, shoe making and carpentry and all the rest? … [Since it is not] … what knowledge does [the kingly art] convey? It must not be the producer of any of those results which are neither good nor bad, but it must convey a knowledge which is none other than itself. Now shall we try to say what in the world this is … ? (*Euthydemus* 291c–292d, tr. Sprague; cf. *Charmides* 171d–75a, which also argues that knowledge of all the particular expertises is not the knowledge required to make one happy.)

According to Malcolm Schofield, the conception of political expertise as an architectonic (that is, ruling) knowledge that knows and controls other kinds of expertise is incompatible with the conception of political expertise as consisting in substantive ethical knowledge of what is good (2006: 136–193). Schofield's only argument for incompatibility, however, is that the notion of an architectonic knowledge "founders" when it is identified with knowledge of the good; but what causes the "foundering" in the *Euthydemus* is the assumption that nothing is good but knowledge. And, from the *Republic* on, Plato's political thought rejects this assumption.

3 Specifying the content and product of political expertise

The *Republic* answers the *Euthydemus*' content problem by specifying both a distinctive subject-matter for the political expert to know—the Forms, especially the Form of the Good—and a distinctive product that the political expert produces—political virtue. Whereas in the *Euthydemus* Socrates contends that the only good by itself is knowledge, which makes other things good by using them correctly, in the *Republic* he distinguishes the *form* of the good from the goods that depend on it for their goodness, on the one hand, and the *knowledge* of the form of the good from the knowledge of good things that it enables, on the other.

> You've often heard it said that the form of the good is the most important thing to learn about and that it's by their relation to it that just things and the others become useful and beneficial … and if we don't know it, even the fullest possible knowledge of other things is of no benefit to us, any more than if we acquire any possession without the good of it. Or do you think it is any advantage to have every kind of possession without the good of it? Or to know everything except the good, thereby knowing nothing fine or good?
>
> (*Republic* 505a–b, tr. Grube-Reeve)

The *Euthydemus*' problem of saying what good is produced by knowledge if knowledge is the only good by itself is here resolved by allowing the good product to be different from the good that is known, and the good of knowing. To know the Form of the good is to

be in contact with—perhaps in a way to "participate in"—a supremely good object and that is a good condition for us to be in, for it is the perfection of our reason (518c–e). Further, knowing the Form of the good has a distinct product: knowledge of "fine and good things," which presumably specifies how much, when, and so on, the "knowledge of other things," should produce. For since the form of the good is the cause of the goodness of each thing, knowledge of it enables one to tell whether, and to what extent, each particular law, policy, person, and action is good in the circumstances. Plato suggests that knowledge of the Forms makes judgments about their sensible instances more accurate. He explains to Glaucon that philosophers, who know what each thing is, alone have a clear model in their souls to which they can refer when they establish conventions about what is just, fine, and good (484c–d). In his imagined speech to the reluctant philosopher-rulers urging them to rule, Socrates says,

> When you are used to [the darkness back in the cave] … you'll see vastly better than the people there. And because you've seen the truth about fine, just, and good things, you'll know each image for what it is and also that of which it is the image
>
> (520c, tr. Grube-Reeve).

So the knower of the Form of the good benefits, *qua* philosopher, from his very contact with it and, *qua* ruler, from the correct judgments that knowing it enables.

One answer to the question: "why *philosopher* -rulers?" then, is that wise rule requires knowledge of the Forms and philosophers just are those who know forms. A second answer, stressed by Plato as well as by commentators, is that because those in power should rule for the good of the governed, rather than turning against those they are meant to protect, those people should be in power who, because they love wisdom, will have no interest in the material possessions or honors of the others in the city, and so no reason to turn on them. If one's desires are trained on the objects of wisdom, they are at the same time trained away from the competitive material things that lead most people to injustice (485d–87a). The philosopher-ruler of the *Republic* does not have

> the leisure to look down at human affairs or to be filled with envy and hatred by competing with people [because] … as he looks at and studies things that are organized and always the same, that neither do injustice to one another nor suffer it, being all in a rational order, he imitates them and tries to become as like them as he can [because he cannot] … consort with things he admires without imitating them.
>
> (500b–c, tr. Grube-Reeve)

In particular, philosophers' love of wisdom and absorption in the Forms makes them uninterested in ruling, which in Plato's view recommends them for the job (346e–347d, 520e–521b, 540b). Nevertheless, rule they must (519b–520e)—a requirement which raises its own motivational problems. Philosophers' harmlessness, however, is an insufficient recommendation unless they are competent at ruling—contrary to what is claimed by George Klosko (2006: 175), according to whom Plato should have argued that philosophers ought to rule not because their knowledge equips them to make good practical judgments but because of the impact of the knowledge on their moral character.

It is in general a good idea to read Socrates' claims about the ideal city in the *Republic*

in the light of his conversation with the interlocutors and Plato's interaction with his readers. Christopher Bobonich (2007) argues on this basis that philosophical knowledge or knowledge of Forms is not required for correct judgments about whether particular laws, actions, and so on are good, fine, and just, for without possessing such knowledge (1) Socrates and his interlocutors agree about which acts are unjust (442e–443a), (2) Plato's readers follow the arguments for reforming the place of women and children in Book 5, and (3) the good and fine inhabitants of the ideal city are able to determine laws regulating market transactions themselves (426e–427a). Bobonich thinks that philosophical knowledge is only required for the task of shaping characters.

Let us take Bobonich's points in reverse order. (3) Legislation about business dealings may be redundant in a well-governed city because citizens' attitudes have already been shaped by the same general principles as would be applied to legislation about business dealings. I don't need a law telling me not to overprice my goods if I've been raised not to want to acquire as much money or material gain as possible; if asked, I can come up with a law against overpricing myself. Still, this hardly shows that non-philosophical citizens are capable of determining correct laws for everything aside from character-formation. Socrates' proposed reforms (2) and the interlocutors' and readers' agreement about the justice and injustice of particular actions (1) are possible because without knowledge of Forms it is still possible to come to a true judgment—indeed that is the heart of the political virtue that results from the musical education of citizens—but knowledge of Forms provides a standard that *guarantees* accuracy in judgments. Still, virtuous character is the most important product of philosophical rule, as we shall now see in the way that Plato develops the idea of political virtue, an idea he initially attributes to Protagoras.

As we saw above (Section 2), in the *Protagoras*, Plato attributes to Protagoras the claim to teach political expertise (*politikē technē*, 319a). When Socrates wonders whether virtue (*aretē*) can be taught (320b–c), Protagoras begins his affirmative answer with the natural virtues that everyone shares (323a) because Hermes distributed justice and a sense of shame to everyone alike (322c–d), a fact evidenced by the human capacity to live in cities (323a). But, Protagoras continues, in addition to our natural capacities we need acculturation by means of good examples and punishments, first in the case of particular actions, then in the case of character, and finally, the law (325c–e). Over and above all these ways of teaching virtue is Protagoras' own contribution to "making citizens noble and good" (328b), which succeeds where fathers and guardians like Pericles fail. It is not clear whether Protagoras' contribution is to produce a higher level of political virtue (*politikē aretē*) in citizens than is provided by nature and culture, or to reproduce in them the political expertise (*politikē technē*) he himself possesses; indeed, these may not be distinct in his view. (One reason to suppose Protagoras doesn't distinguish them is that he says that before the gods gave them justice and a sense of shame, people were unable to band together for their common protection against animals, for, lacking *politikē technē* they wronged one another when they tried to come together (322b–c); their subsequent ability to do this suggests that the justice and sense of shame they received from the gods was *politikē technē*. Further, Protagoras goes on to explain that everyone in Athens is consulted on matters of policy because everyone is supposed to possess *politikē aretē* (322d–323a), which is not the case with the *aretē* of carpentry, shared only by a few. Perhaps Protagoras assimilates *aretē* and *technē* to make it plausible that *aretē* is teachable; Socrates later points out the inconsistency in Protagoras' denying that virtue is knowledge while insisting that it is teachable (361b–c).)

Socrates takes up the topic of political virtue in the *Republic*, distinguishing it from perfect virtue (the virtue of philosophers) (430b–c) and describing philosopher-rulers as craftsmen of political virtue (*dēmiourgos dēmotikēs aretēs*, 500d). The philosopher-ruler *qua* craftsman of political virtue "looks often in each direction, towards the natures of justice, beauty, moderation, and the like, on the one hand, and towards those they're trying to put into human beings, on the other" (501b, tr. Grube-Reeve). After having seen the form of the good, philosophers "must each in turn put the city, its citizens, and themselves in order, using it as their model" (540a–b).

In the *Republic*, political virtue is an education-inculcated, good but not perfect condition of soul, consisting in true beliefs about how to live one's life. This condition of soul in citizens is responsible for the city's possession of the virtues (see further Kamtekar 1998 and 2004). So, for example, the city is moderate because its citizens believe in common that their rulers should rule, political moderation being correct opinion about who should rule and who should be ruled (431c–d). Socrates defines political courage as "the power to preserve through everything the correct and law-inculcated belief about what is and isn't to be feared" (430b–c), and contrasts it with the philosopher's (wisdom-based) courage, which is "the preservation through pains and pleasures of the declarations of [one's own] reason about what is and isn't to be feared" (442b–c), for the philosopher knows that death is not terrible, because he knows that human life is not great by comparison with the whole of being which he studies (486a–b).

It is important but not obvious that the beliefs that constitute political virtue are true. The obstacles to seeing that these beliefs are true are two: first, Socrates recommends that certain untruths be told to the citizens of the ideal city, notably the "noble lie" that they are all children of the earth and that they have metals of different value—gold, silver, and bronze—in their souls, which determines their social role (414b–415c). Second, Socrates approves in general lies that keep friends or co-citizens from harm and that relate deeds of the gods about which we can have no knowledge; he says these merely "spoken falsehoods" can be "medicinal" in value (382a–d). In the same passage, however, Socrates criticizes "true falsehoods," that is, false beliefs about the standards for how to live, and his main principle for determining which stories about the gods may be told in his city is whether the stories are true—whether they represent the gods as they are (377d–e), good and consequently the cause of only good things, unchanging in character, and undeceiving (379a–383c). The key here is to distinguish between truths about value, about which Socrates is uncompromising, and truths about events, about which he is cavalier. Indeed, the premise of the whole musical education of the guardians is that children are taught through stories which are—as a whole—false, but have something of the truth in them (376e–377a). From this point of view we can see that the "noble lie" tells a *truth* about the important matter that the citizens are all interdependent and have different natural capacities that suit them for different jobs. It is also worth noting that Socrates cannot insist on the truth of many of the beliefs about how to live taught in the musical education until he has established that virtue is better than vice at the end of *Republic* 4. If he did, he would be assuming what he has to prove (cf. 392a–c, and for further discussion, Kamtekar 2010.)

When we see that the *Republic* specifies political expertise's goal of producing virtuous citizens as the goal of producing *politically* virtuous citizens, we understand how the individual goal fits with the *Republic*'s more collective-sounding aims for the constitution or the law, such as the happiness and unity of the city. First, the city's institutions contribute to individual citizens' virtue and individual citizens' virtue constitutes the

city's virtues. Take for instance, the limit on wealth and poverty, to free the city from the faction between rich and poor that divides most cities (422e–423a), the community of wives and children among the guardians to replace the biological family so that instead of having privatized concerns they might all be pleased and pained by the same things (461e–462e), and the terms of address for each class to use for the others that remind them of each other's civic contributions, viz., "nourishers" rather than "slaves," or "preservers and auxiliaries" instead of "masters" or "rulers" (462e–463d). These institutions reinforce the citizens' true beliefs in their mutually beneficial interdependence, and the beliefs are, in turn, the condition of the city being truly unified.

Scholars (for example, Williams 1973) have debated whether the *Republic*'s city-soul analogy is really consistent with Socrates' claim that cities get their characters from their citizens. Jonathan Lear (1992) argues that cities get their characters by the mechanism of "externalizing"—individuals imposing their characters on the city—and individuals get their characters by "internalizing" the values of their city. Against this, Ferrari has argued that the defective cities of *Republic* 8–9 are not ruled by the correspondingly defective characters—for example, the timocracy is ruled by men who are secretive and stingy with their money, whereas the timocratic character begins life despising wealth and ends life openly enjoying it (2003, 66) and the oligarchy is not ruled by thrifty oligarchic types but by spendthrifts (70). These differences can, however, be explained by how the circumstances of a given constitution influence how the corresponding type manifests his character when ruling. Presumably the timocracy's ruler needs to be secretive about his love for money because he is supposed to love and pursue honor alone; the timocratic character, not being in the public eye, need not worry about this. Again, the difference between the ruler in an oligarchy and the oligarchic type is explained by whose money they are spending or saving (others' or their own?) and how much they have at their disposal. Finally, it is worth noting that, apart from Socrates' remarks in the *Republic* that constitutions get their character from the citizens in them (435d–e, 544d), for which the most plausible mechanism would seem to be rule by citizens of that character, in the *Gorgias* too Socrates argues that to have power in a given regime, one's character must be like that of the regime (510a–d).

It does seem a general principle in the *Republic* that constitutions are identified by the values that dominate in them—whether these values dominate by being the dominant values of their rulers or in some other way. So because of the predominance of spirit in the timocracy, a predominance due to rule by the spirited and military types (547e, 549a), what is most manifest in it is the love of victory and honor (548c); the oligarchic constitution, "the constitution based on a property assessment, in which the rich rule, and the poor man has no share in ruling" (550c–d), and in which the rich are praised and admired, is the constitution in which the love of money and the practice of money-making dominate (550d–551a); the democratic constitution values freedom above all, and so allows individuals to be of whatever constitution/character they wish (557b, 562b–c).

Identifying constitutions by their dominant values rather than by the class that rules them changes the discourse around constitutions, which before Plato has been in terms of "who rules": when Herodotus imagines Persian nobles debating the merits of various constitutions, they identify constitutions by who rules, whether one, few or many (3.80–82); in the Funeral Oration, Pericles says the Athenian constitution is called a democracy because the power is in the hands of the people (Thucydides 2.37); Aristotle analyzes the constitutions he discusses as "combining" elements of

rule by one, a few, and many. This way of classifying or identifying constitutions goes along with a certain way of analyzing constitutions and constitutional arrangements in terms of interests—one clear example would be the "Old Oligarch's" *Constitution of Athens*, which shows how Athenian institutions empower the people, who rule. In Plato's *Republic* the sophist Thrasymachus asserts that in *every* constitution the laws serve the interests of the rulers (338c); in the *Laws* the Athenian Stranger reports that many people hold this view and he himself speaks indifferently of the interests of the constitution and of its rulers (714c–d). Critical minds add to the question "which constitution is best?" the further question, "best for whom?" By taking as his task the design of a city whose law aims to make the whole city as happy as possible, the *Republic* changes the question to, "what [value] should rule?" Plato retains this focus in the *Statesman*, where the Stranger explicitly rejects the classification of constitutions by "who rules." Having first catalogued these classifications—whether the rule is by one, few, or many, and then, with a finer grain, whether the rulers rule with or without law, whether they rule with or without the consent of the ruled, and whether the rulers are rich or poor, to yield the constitutional forms, kingship, tyranny, aristocracy, oligarchy, and two kinds of democracy (291d–e)—he then dismisses them on the grounds that the only criterion for correctness of constitution is whether the ruler(s) are wise (292a–c) about how to benefit the ruled (296d–e). A consequence is that in the absence of wise rulers, a constitution should adopt the rule of law as the embodiment of wisdom (293e–303b). Here it seems clear that Plato takes the question "which constitution?" not as "which class should have political power?" but as "*what* should be the main principle/*archē*/*telos* of the constitution that determines the collective way of life of the citizens?"

Plato's question is a possibility already latent in earlier ideas about constitutions. Pericles' Funeral Oration glosses "constitution" as "way of life" (Thucydides 2.36). Isocrates says that the soul of a city is its constitution, having power over it just as intelligence does over the body, for it is the constitution that deliberates about how to preserve what is good and avoid what is bad, and makes the laws like itself (*Areopagiticus* 14, cf. *Panathenaicus* 138). The political question of which constitution is best thus runs parallel to the ethical question, important to Socrates but also to others (cf. Euripides' *Antiope*), what *bios* (individual way of life) is best? In moving from "who rules?" to "what rules?" Plato is merely taking the analogy between soul and city, or *bios* and *politeia*, one step further, for an answer to "which is the best individual way of life?" would be stated in terms of the overarching goal pursued by a given way of life. This suggests that not only does Popper wrongly attribute to Plato a mistake about the fundamental question of politics (who should rule?) that Plato inherits from his predecessors, but he also fails to notice that in Plato's hands, the "who should rule?" question becomes a "what should rule?" question. Popper could no doubt also object to the question, "what values should our community adopt?" on the grounds that this is a question for individuals to answer freely for themselves, but this ignores the reality that before individuals are ready to ask this question, state, market, and society influence us unawares by shaping our beliefs and desires: we acquire beliefs and desires because they are widely held, or are held by those who are widely admired—for example, consumerist values in our time, pleonectic values in Plato's. As adults we have the ability to step back and examine the processes by which we came to have the values we do, but by the time we acquire this capacity those values have become habits very hard to change by reason alone.

4 Philosopher-rulers after the *Republic*?

Although the *Republic*'s account of philosophical rule is able to solve the content problem for specifying the distinctive subject-matter and good product of political expertise, the philosopher-ruler seems to disappear from the dialogues after the *Republic*. The *Timaeus*' reprise (17c–19a) of what otherwise sound like the political proposals of the *Republic* stops just short of philosopher-rulers; the *Statesman* classifies political expertise as theoretical knowledge but makes no mention of philosophy or at least of philosophers' distinctive objects of study, forms; in the *Laws*, the Athenian warns that with unchecked power, even one who has an expert's grasp of what unites a city will favor himself and pursue pleasure rather than acting for the sake of the common good (875b–c), whereas in the *Republic* (412c–d) Socrates had said that the rulers should be those citizens who most of all identify their own good with the good of the city; this is the Athenian's third assertion that there is no-one of such a nature as to wield great power without being corrupted and becoming arrogant and unjust (691c, 713c–d).

Glenn Morrow (1993/1960) argues that Plato's commitment, from the *Republic* to the *Laws*, is to the rule of philosophy, with the replacement of philosopher-rulers by laws being only a change of emphasis in how philosophical rule is to be institutionalized. On the one hand, the philosophers who rule the established city of the *Republic* rule through laws—they are, after all, called guardians of the laws (421a, 484b, 504c). On the other hand, the guardians of the laws in the *Laws* must, in addition to supervising magistrates' adherence to the laws, revise laws when necessary (770a–e), which must require them to understand the aim of the law and be able to reflect critically on the existing laws. Further, the Nocturnal Council, a select group consisting of the ten oldest guardians of the laws, distinguished priests, the present and past magistrates in charge of education, and young men of their choosing (951d), receive a philosophical education (Morrow 1993/1960: 573–576).

In support of Morrow, the Nocturnal Council answers to the *Republic*'s requirement that the best city always have among its citizens some who have an account of the constitution (497c). The passages in the *Laws* about the corruptibility of people wielding absolute power all deny the existence of a person who *by his nature* could withstand the temptations opened up by great power (cf. the *Republic*'s warnings about the corruptibility of the philosophic nature, 492a–495b). It does not follow that *philosophical* education could not enable this—and when it comes to the Nocturnal Council (969b–c), the Athenian seems to think that the city can be entrusted to its care. Further, the Statesman's discussion of law shows that Plato is not simply introducing law because he has given up on rule by an expert person. At *Statesman* 294d–295c, the Visitor explains that even a political expert must rule with laws. The expert cannot be by the side of every individual, advising them what exactly the right thing to do in their circumstances is, so he gives the group laws that prescribe roughly the right thing to do for most of the people in most of the circumstances. So law is not only for cities in which there is no political expert. Further, the Visitor is clear that its claims about the *superiority* of the rule of law are for the common circumstance in which "a king does not come to be in cities as [a king-bee] is born in hives, one straightforwardly outstanding in body and mind" (301d–e; in this it is not so different from the *Republic*, according to which it is unlikely, although not impossible, for philosophers to become rulers, or rulers philosophers). In common circumstances law must be sovereign because there is no political expert at hand, and law preserves the wisdom of legislators of the past (294a–303b, cf. *Laws* 875d).

Establishing whether and/or how much Plato changed his mind about the possibility of philosophers' rule from the middle to the late dialogues would take far more space than is available here, because of the many dimensions of his thought that bear on the issue: ethical psychology, politics, epistemology (for which see Bobonich 2002). So instead, I conclude by mapping the connections between the presence or absence of philosopher-rulers and the dialogues' different conceptions of the knowledge that qualifies one to rule well. One, explored in the *Statesman*, is of something very like Aristotelian practical wisdom; the other, explored at the end of the *Laws*, is of the philosophy of Plato's late dialogues, in which an intelligent God (*nous*) plays a central role.

In the *Statesman*, as in the *Republic*, political expertise is identified by its product: the kingly art weaves together into a unity the naturally courageous with the naturally moderate by means of a bond of true opinion about what is fine, just and good (309b–c). But unlike the *Republic*, the *Statesman* says nothing about knowledge of forms, instead concentrating on the political expert's control of all other kinds of expertise, mastery of timing (305d) and grasp of due measure, the correct quantity for bringing something into being (283d–285c). Whereas in the *Republic*, decline from the best constitution is inevitable because not even philosopher-rulers with their knowledge of forms can grasp the marriage number that determines the correct time for reproduction through calculation and perception (546a–e), the *Statesman* admits no deficiency in political expertise (although it also excludes breeding as belonging to "rearing"). Finally, the *Statesman* is silent about the moral dispositions of the political expert.

Some of these differences are best explained as due to the two dialogues' different projects: in the case of the *Republic*, to describe the best constitution, which includes the way of life of the city governed by this constitution, and that importantly involves the education and character of its rulers, and in the case of the *Statesman*, to define political expertise. That difference would explain why the *Statesman* might not mention the moral dispositions of the political expert: these dispositions are (as in the *Republic*) pre-conditions or effects of wisdom, and so do not belong, strictly speaking, to the definition of political expertise. It may even explain the *Statesman*'s silence about knowledge of forms: strictly speaking, if the product of political expertise is political virtue, then the expertise itself is just that intellectual ability that brings political virtue into being, whatever its content and whatever the conditions of its development. Aristotelian practical wisdom, the ability to deliberate well and to grasp salient particulars, is similarly a black box.

Attempts to find a more radical rejection of philosopher-rulers in the *Statesman* have not succeeded. According to John Cooper (1999), the Visitor "puts a question mark" over the dialogue's initial identification of "political expert" with "king." For the Visitor says that general, orator, judge (304a) and educator (308d) are co-causes of citizens' virtue, which requires the use of persuasion rather than force to inculcate reasoning-based true opinions. But the Visitor unequivocally identifies kingship with political expertise (258d–259d, on which see Brown 2010; cf. 279a, 284b, 289d, 294a, 301b) and *permits* the political expert to use force rather than persuasion (292c–293d, 296b–297b)—although this is consistent with Plato's *predicting* that the political expert will use persuasion, given his goal of inculcating true beliefs (for one thing, force does not result in stable true beliefs, *Republic* 536e).

Perhaps the bit of text most suggestive of a radical rejection of philosopher-rulers is the Visitor's distinction between the way humans were supposedly reared by a god in the age of Cronus (or the way sheep are now reared by a shepherd) and the way a human

ruler who is like his subjects in nature and education should rule (267d–76e; for this reading see Morrow 1993/1960: 585). Yet the point of this distinction is that the human ruler is not a nourisher (*trophos*, 268c) of his subjects, who must provide for themselves, and that the human ruler rules over willing subjects—neither of which conflicts with philosopher-rulers. In any case, the Visitor subsequently dismisses as irrelevant to correctness of rule or constitution citizens' prosperity or consent to rule; the only relevant thing is the ruler's knowledge of how to improve the citizens in virtue (292c–293d, 296b–297b). The point of this seems to be that prosperity and consent are *consequences* of the political virtue brought about by expert rule, and not (as is virtue) expert rule's defining goal. (For further discussion see Kamtekar 2004.)

I conclude this discussion with two speculative alternatives. It is tempting to imagine that Plato's silence about philosopher-rulers, or more generally about the content of the theoretical knowledge that constitutes political expertise in the *Statesman* is in reaction to Aristotle's arguments in the *Nicomachean Ethics* (1) that the form of the good could not explain the ways in which the different kinds of things that are good are good and (2) that making something good requires not knowledge of the Form of the good but instead deliberative excellence, sensitivity to salient particulars, and so on (cf. Klosko 2006: 207). If that is the case, then the goodness or benefit of the knowledge that qualifies someone to rule (or live) well need not in any way derive from the goodness of the object known—what is known might be quite prosaic facts about human character and what makes us happy. By contrast, the Forms are such objects that their very grasp motivates us to imitate them (*Republic* 500b–c).

The figure that best corresponds to the philosopher-ruler of the *Republic* in the late dialogues is the creative Demiurge of the *Timaeus*, who uses the Forms (30c–31b) to order the world to make it as good as possible, because he lacks envy (29e). (However, insofar as the Demiurge is not part of the world he creates, he is even more like the *Republic*'s law-giver.) Unlike the philosopher-ruler, the Demiurge does not have a Form of the good to look on and imitate; instead, his intelligent ordering activity is the source of the goodness found in the created world. Could a human ruler or legislator be moved by a grasp of the intelligent design of the created world? Being mostly concerned with the principles, aims, and means of legislation for the second-best state, the *Laws* does not directly address this question. At the end of the work, the Athenian says that the Nocturnal Council should know the definitions of the virtues and what they have in common; similarly for goodness and beauty; also astronomy and theology, in particular that the soul is senior to the body, and that the heavenly bodies are ruled by intelligence (*nous*). Such education enables people to rise above ordinary virtue and to rule (968a). In this case perhaps the orderliness of the cosmos is a descendant of the Form of the good, the grasp of which can transform its knowers morally as well as intellectually.

References and further reading

Annas, J. (1981) *An Introduction to Plato's Republic*, Oxford: Oxford University Press.

Bobonich, C. (1995) "The Virtues of Ordinary People in Plato's *Statesman*," in C. Rowe (ed.) *Reading the Statesman: Proceedings of the III Symposium Platonicum*, Sankt Augustin: Academia Verlag: 313–329.

Bobonich, C. (2002) *Plato's Utopia Recast*, Oxford: Oxford University Press.

Bobonich, C. (2007) "Why Should Philosophers Rule? Plato's *Republic* and Aristotle's *Protrepticus*," *Social Philosophy and Policy* 24: 153–175.

Brown, E. (2010) "Plato on the Unity of the Political Arts (*Statesman* 258d–259d)" available online at, http://www.artsci.wustl.edu/~eabrown/pdfs/UnityPoliticalArts.pdf.

Cooper, J. (1999) "Plato's *Statesman* and Politics," in J. Clearly and G. Gurtler (eds.) *Proceedings of the Boston Area Colloquium in Ancient Philosophy* vol. XIII, Leiden: Brill: 71–104.
Ferrari, G. (2003) *City and Soul in Plato's Republic*, Chicago, IL and Sankt Augustin: Academia Verlag
Kamtekar, R. (1998) "Imperfect Virtue," *Ancient Philosophy* 18: 315–339.
Kamtekar, R. (2001) "Social Justice and Happiness in the *Republic*: Plato's Two Principles," *History of Political Thought* 22: 189–220.
Kamtekar, R. (2004) "What's the Good of Agreeing?: *Homonoia* in Platonic Politics," *Oxford Studies in Ancient Philosophy* 24: 131–170.
Kamtekar, R. (2006) "The Politics of Plato's Socrates," in S. Ahbel-Rappe and R. Kamtekar (eds.) *A Companion to Socrates*, Oxford: Blackwell: 214–227.
Kamtekar, R. (2010) "Ethics and Politics in Socrates' Defense of Justice," in M. McPherran (ed.) *Cambridge Critical Guide to Plato's Republic*, Cambridge: Cambridge University Press: 65–82.
Klosko, G. (2006) *The Development of Plato's Political Theory* (2nd edn.), Oxford: Oxford University Press.
Lear, J. (1992) "Inside and Outside the *Republic*," *Phronesis* 37: 184–215.
Menn, S. (2006) "On Plato's *Politeia*," *Proceedings of the Boston Area Colloquium in Ancient Philosophy* vol. 21: 1–55.
Morrow, G. (1993/1960) *Plato's Cretan City*, Princeton, NJ: Princeton University Press.
Popper, K. (1962) *The Open Society and Its Enemies* vol. I: *The Spell of Plato,* Princeton, NJ: Princeton University Press.
Schofield, M. (1999) "The Disappearance of the Philosopher-King," in J. Clearly and G. Gurtler (eds.) *Proceedings of the Boston Area Colloquium in Ancient Philosophy* vol. XIII, Leiden: Brill: 213–41.
Schofield, M. (2006) *Plato: Political Philosophy*, Oxford: Oxford University Press.
Taylor, C. C. W. (1986) "Plato's Totalitarianism," *Polis* 5: 4–29.
Vlastos, G. (1971) "Justice and happiness in the *Republic*," in G. Vlastos (ed.) *Plato II:Ethics, Politics, and Philosophy of Art and Religion. A Collection of Critical Essays*, New York: Doubleday: 66–95.
Vlastos, G. (1977) "The Theory of Social Justice in the *Polis* in Plato's *Republic*," in H. North (ed.) *Interpretations of Plato*, Leiden: Brill: 1–40.
Williams, B. A. O. (1973) "The Analogy of the City and Soul in Plato's *Republic*," in E. N. Lee, A. P. D. Mourelatos and R. M. Rorty (eds.) *Exegesis and Argument:Studies in Greek Philosophy Presented to Gregory Vlastos*, Assen: Van Gorcum: 196–205.

Related chapters

13. Plato: virtue and the good life
14. Plato: philosopher-rulers
15. Plato: metaphysics
17. Plato's *Poetics*
24. Aristotle on the good life
25. Aristotle on the political life

15
PLATO'S METAPHYSICS

Allan Silverman

A chapter on Plato's metaphysics is an exercise in humility. First, save perhaps for the *Parmenides*, no dialogue is devoted to what we might consider metaphysics. Second, there is no sharp line in Plato between metaphysics and epistemology, philosophy of language, methodology, cosmology, or value theory. Almost every dialogue, to differing degrees, takes up metaphysical issues in the course of its inquiry. Third, within each dialogue, and certainly across the span of the dialogues, it is difficult to say with much confidence that Plato believes this or that. Plato seems to try out ideas and positions, sometimes to address matters that arise in the course of the conversation within a given dialogue, sometimes to provoke the reader to think through an issue, and even sometimes because he himself is uncertain.

Forms

Plato is most famous for a metaphysical thesis: the Theory of Forms. Forms are the focus of his writings on epistemology, ethics, and all (what later come to be called) areas of philosophy. From the early Socratic dialogues until the late *Philebus*, *Timaeus*, and *Laws*, Forms, or at least items that arguably are their predecessors or successors, do philosophical work wherever they appear (Cherniss 1936). There is some dispute whether Forms are introduced primarily for epistemological or metaphysical reasons, whether over time the tasks they perform change or differ, and whether the nature of Forms or particulars alters (Owen 1953, Ryle 1939). That they do so much work over such a long span of dialogues and in so many domains is another reason to be humble: one cannot hope to present in anything of reasonable length the various possible differences in Plato's conception of Forms or the range of topics wherein Forms do work. Fortunately, there are many articles and book-length treatments of at least different aspects of Plato's metaphysics, so the reader has more extensive treatments available than I can offer in this limited format (Silverman 2002). (In this contribution, I will not remark upon the Socratic dialogues (Dancy 2004).)

Among modern metaphysicians, ontology and metaphysics are often treated as different endeavors. Roughly, ontology is the narrower of the two, and consists in listing those items which, given one's viewpoint, exist. In an older tradition, this qualifies as an aspect of special ontology, whose focus initially in the writings of Plato and Aristotle is on a special subset of things that are: substances. Metaphysics is a broader, explanatory endeavor that treats of the nature of existence. An even more general pursuit is meta-metaphysics, which investigates questions about metaphysics: for instance, do metaphysical questions have determinate answers, or what is the proper methodology

for metaphysics (Chalmers, Manley, and Wasserman 2009). In previous eras, much of what concerns the metaphysician or meta-metaphysician qualified as general ontology, or the study of general principles that hold true of anything that might be. In Plato's case, among the general principles or notions are part and whole, one and many, sameness and difference, perfection and imperfection, participation and being, paradigm and copy, form (universal) and particular. Plato does have a hierarchical special metaphysics according to which different items turn out to qualify as beings of various sorts and stand in different relations to one another. These beings, *onta*, fall into two broad categories: the primitive, or independent, or perfect, or paradigmatic, or basic beings, and those that are dependent, or imperfect, or copies, or somehow derived beings. The Forms, it seems, are beings of the former kind. Material particulars, or at least some aspects of material particulars, are beings of the latter variety. The relation linking the basic Forms to the derived particulars is participation, for which Plato uses a host of expressions. (Some would reserve "being (*on*)" for Forms, though the Platonic texts generally do not limit the use of the Greek expression to them.) In addition, throughout the course of the dialogues, souls count as beings. In the *Timaeus*, the receptacle also seems to be a primitive element. There is great dispute about the status of matter, or primitive material elements especially in the *Timaeus* and *Philebus*.

The neat dichotomy of perfect Forms and imperfect material particulars (henceforth "particular" will be used of material particulars) is controversial. Starting from the seminal work of G. E. L. Owen (1957), many have argued that at least in the middle-period Plato countenances Forms only for a limited number of properties, those that are incomplete or relative, for example, Beauty, Justice, Largeness, Equality (Fine 1993; Harte 2008; Irwin 1977, 1995). Precisely which properties are captured under this rubric is disputed. Not included are natural kind properties such as man, and arguably any property that is somehow complete, for example, fire (*Prm.* 130b–d). In addition, there are sensible properties such as being bright-colored or being six feet tall, for which there are no Forms. On this approach, Forms are not responsible for all the properties of the material particulars. Thus, from the ontological vantage point sketched above, while Forms may indeed be the most basic beings, the status of both the non-Form properties and sensible properties, as well as of particulars, such as Socrates, is uncertain. Perhaps they share a feature with Forms that makes them basic; or maybe there are (at least) two ways to be basic; or Plato simply had not thought through the implications of his "theory" (*Phd.* 101c–e). Hesitancy over ascribing a metaphysical theory to Plato seems especially fitting to those who think Forms have a limited range in the middle period.

Texts alone do not settle the dispute over the range of Forms. *Phaedo* 75c10–d5 is a representative passage:

> For our present argument is no more about the Equal than about the Beautiful itself, the Good itself, the Just, the Pious, and, as I say, about all the things on which we put as a seal this mark "what is," and about which we ask and answer in our questions and answers.

What are all the things on which we set this seal? A related question is: Why does Plato think that there are Forms? Or perhaps not equivalently, what work do Forms do (at least in these middle period dialogues)?

One place to seek answers is the variety of ways Plato contrasts Forms and particulars. (See especially *Phd.* 78b4–84b8.) One fundamental difference is that Forms are simple

or one (*en*), whereas particulars are complex or many. This feature is connected to an argument that historically is given pride of place among arguments for Forms, the "One Over Many": where (we recognize) there are many items that share a feature or property, we posit a Form of that feature or property. Since there are many large things, for example, Everest and Shaquille O'Neal, we posit a Form of Largeness; since there are many men, for example, Socrates and Plato, we posit a Form of Man. "One Over Many" reasoning makes Forms universals, items that are (by definition) predicable of many, and draws no distinction between incomplete and complete properties. This argument does not speak to the sense in which a particular is a many. But the *Phaedo* reveals that a particular is many because it has many properties (*Phd.* 80b4), whereas a Form is one because it has or is a single thing or property (*Phd.* 78d5, 80b2). Socrates is a man and is large. But Largeness is large and apparently nothing else. There are other contrastive features of Forms and particulars. Forms are immaterial and unchanging. Forms are invisible and outside of space and time. Forms are intelligibles. And Forms do not suffer from the "compresence of opposites": the Form of Largeness is large and never or in any way not large. Particulars, conversely, are material, changing, visible and in space and time. Particulars are perceptible (and/or the object of belief), and, finally, particulars suffer from the compresence of opposites: this stick is equal (to this second stick) and unequal (to that third stick).

Unlike "One Over Many" reasoning, the compresence of opposites is critical to those who think that Plato at least begins from a limited range of Forms. Reasoning from compresence is epistemologically driven.

> I want to address a question to our friend who doesn't believe in the beautiful itself or any form of the beautiful itself that remains always the same in all respects but who does believe in the many beautiful things … 'My dear fellow,' we'll say, 'of all the many beautiful things, is there one that will not also appear ugly? Or is there one of those just things that will also not appear unjust? Or one of those pious things that will not also appear impious? … What about the many doubles? Do they appear any the less halves than doubles? … Is any one of the manys what someone says it is, then, any more than it is not what he says it is?'
>
> (*Resp.* 479a–b)

At first blush, particulars suffer from the compresence of opposites, but not with respect to all properties. Socrates is not both a man and not a man. He is, however, large with respect to Xenophon and small (not-large) with respect to Plato. Whatever suffers from compresent opposites is thought to be unsuitable as an object of knowledge. Exactly why it is unsuitable is unclear. Perhaps Plato thinks that something is knowable just in case it is not complex. Particulars are unknowable because they are complex. Each Form is knowable because it is simply whatever it is. More plausibly, one should locate the problematic feature not in the mere multiplicity of properties but in the compresence of a property and its opposite. Somehow the particular's being F and not-F makes it difficult or impossible to know either Fness or not-Fness. Alternatively, perhaps the problem is more about explanation. One task that Forms perform is to explain why something else is so. A Form of F explains why other things are F by making them F. Were an explanans of F also not-F, then it would cause its participant to be both F and not-F and thus no more explain what it is than what it is not. If we assume, reasonably,

that Plato seeks an explanation of why things are large, or just, or beautiful, and if we also reasonably assume that the explanans must be intelligible, given that what suffers from compresence is not intelligible—that is, explanatory—then, first, particulars cannot be intelligible at least in the respect to which they suffer compresence; and, second, in respect to which they suffer compresence there must be some item, a Form, that does not suffer compresence.

The periphrastic manner of expression signals a worry. Sometimes particulars suffer from the compresence of opposites: the stick is (or appears) and is not equal (*Phd.* 74a9–75a3); Socrates is large and small (*Phd.* 102a10–d2). On other occasions, it seems that a property suffers compresence. Not just any property, according to those who take this epistemological track. The guilty are sensible property types. The epistemological impetus for postulating Forms is that attempts to understand the incomplete properties by appeal to sensory or perceptible properties fail (*Phd.* 100a9–e3). These sensible properties suffer compresence with respect not to particulars, but with respect to the Forms they are hypothesized to explain. For instance, being brightly colored is a sensible property hypothesized to explain what Beauty is. Bright color suffers from compresence because it makes some things beautiful and it makes other things not beautiful. Beauty's ontological/explanatory job is to make things other than itself beautiful. What allows it to fulfill this function is, on the one hand, that it is beautiful, and, on the other hand, that there is a relation of partaking by which particulars can have a share of Beauty: by participating in Beauty, Van Gogh's *Sunflowers* comes to be beautiful. *Sunflowers* also participates in being bright colored. What is the relation between being beautiful and being bright colored? Imagine someone who explains what makes *Sunflowers* beautiful by saying it is because of the bright color. Nothing rules out that what in fact makes *Sunflowers* beautiful is its bright color. What is problematic is not the attempt to explain the particular case, but it would be mistaken to think that what makes anything beautiful is bright color and that anything bright colored is beautiful. More generally, there is a problem in thinking that the incomplete properties can be sensible properties such as being bright-colored or being six feet tall. If all sensible properties suffer from compresence then no sensible property can be intelligible. Since Forms must be intelligible, no Form is a sensible property.

I think that the basis for positing Forms is more ontologically driven, even if prompted by these sorts of epistemological considerations. Perhaps the best way into the ontological account is to focus on the fact that Forms, whether on a wide or limited account, explain why or bring it about that a particular has the property it does, or why many particulars share a property.

> If there is anything beautiful besides the Beautiful itself, it is beautiful for no other reason than that it shares in that Beautiful, and I say so with everything. (*Phd.* 100c)

We are faced with the worry that Largeness, say, must be large in a manner that does not allow for it to be or, even appear, not large. One possibility is that Plato thought that a Form of an incomplete property must somehow be complete. For what is Largeness larger than or Equality equal to; and if they are relative or incomplete, why cannot Equality appear unequal? Maybe Plato thinks that Largeness cannot also be not large because it is larger than everything else. On this understanding of self-predication statements, the Form has the same property in the same way as the particulars that participate in it.

Aproximationists have balked at this analysis, claiming that particulars instantiate properties in an approximate manner, whereas the Form instantiates the property perfectly (Malcolm 1991). In this respect particulars are deficient or imperfect. This works best for mathematical notions such as the circle, since nothing material is perfectly circular, though the Circle Itself might be thought to be. Approximationist approaches, however, are difficult to reconcile with "one over many" argumentation. If every particular is defective in its unique way, there is no many. If some of the many are defective in the same way/to the same degree, then the one over them should be not the Form of Circle Itself, but the Form of Circle-defective-in-this-degree.

Setting aside approximationist accounts, we confront a principal distinction between reconstructions of the Theory of Forms. Typically, but not exclusively, limited theorists maintain that Forms are in fact somehow completely characterized by the incomplete property of which they provide the non-compresent example. Since Plato may well have been confused about (polyadic) relational properties such as Largeness, let us consider Beauty. Some think that the manner in which Plato understands Beauty's power to make what partakes of it beautiful is by transmitting its beauty to them (Dancy 1991, Sedley 1998). Here the model is mass terms like the Hot, or Water. The Hot makes things that partake of it hot by transmitting heat to them. In this case, The Hot Itself is really hot—maybe the hottest thing that there is, and it seems inexhaustibly hot, not necessarily losing any of its heat when it transmits heat to what partakes of it. So, too, Beauty and the other Forms might transmit their respective property. This is a further reason to think that there cannot be Forms of the natural kinds: could the Form of Man be a man such that somehow manhood could be transmitted to particular humans?

Scholars also disagree over Plato's vulnerability to the "third man" argumentation developed in the *Parmenides* (132a1–b2). Starting from one over many considerations, we find a many, here many large particulars, and we posit a Form, Largeness, that explains why these large things are (appear) large. If we accept that Plato is vulnerable to the objection, then the posited Largeness must be large in the same way that the initial many are large. To generate a regress we then add the assumption that nothing explains itself, but since we have a new group of larges consisting of the original many and the newly posited Form that are large in the same way, we need a new one over this many. And so on. (Note that if we thought that what is puzzling about the many larges is that they are large and not-large, it is harder to see how we are to generate a third man argument to which Plato is susceptible. For then the initial many includes things that are large and not-large. We posit Largeness to explain their largeness, but with the proviso that it is not not-large. This alone should suffice to show that the way in which Largeness is large differs from the way in which the many are large.)

Others deny that we need to hold Plato hostage to third man difficulties (Cherniss 1957: 298–339, Code 1986, Fine 1993, Silverman 2002). One option is to allow that self-explainers are acceptable. So, even if one thought that Largeness is large in the same way as things that are large and not-large, one might unite non-compresence and self-explanation and insist that anything that is just large explains its own largeness. Another strategy has been to find an alternative account of the way in which Forms are what they are. Since Forms appear not to participate, or at least not to participate in the very property they stand for, one alternative is to treat the so-called self predication statements as identity claims: "Largeness is large" means just that Largeness is identical with largeness. A different alternative is to maintain that the way in which Largeness is large is a second, distinct, primitive way of being, Being. Here one

segregates Participation and Being. This allows for four conceptions of the things that count as beings, that is, of various kinds of ontological items:

1. Being is enjoyed exclusively by Forms and Forms alone are what they respectively are;
2. Particulars are whatever they are via Participation;
3. Forms enjoy both Being and Participating;
4. Particulars enjoy both Being and Participating.

A traditional reading of what is referred to as Plato's two-world metaphysics of the middle period accepts 1 and 2, 3, as we shall see, is often thought to be something that Plato comes to accept in later works. But there is reason to doubt whether he accepts I even in the middle period. In the *Phaedo*'s final argument (102b–106e), Plato at least says of the Form of Threeness, for instance, that it is three and that it is odd (103e2–104b4). Since odd may be a constituent of the essence of Threeness, that is, it figures in the definition of Three, one might balk at allowing it to be a second property that Three might participate in. But when we turn to the *Republic* and *Symposium*, the Forms of Good and Beauty seem to be features had by all Forms and not to be part of the essence or definition of say Largeness. Here then we might have a Form in which a different Form participates.

4 is another conundrum. Return to the limited theorist, for whom only incomplete, relative and moral properties have Forms over them. What are we to say about the ordinary particulars such as Socrates, and those features of Socrates for which there are no Forms? These will divide roughly into two kinds, the natural kind properties which one may think he has essentially, and other accidental properties for which there are no Forms, for example, being pale. It is tempting to think that Socrates is human in the same manner as Largeness is large, or Beauty beautiful. Let us say that these are essential predications. Such essential predications then involve an essence, *ousia*, and the relation of Being discussed above. In this case, both some particulars and all Forms are essential beings or Beings. Moreover, since Participation is a relation between particulars and Forms, and since particulars also have other accidental properties that are not Forms, there appears to be a need for another relation besides Being or Participation. Here we might say that Plato offers no analysis of them or of how they are related to the particulars that have them, perhaps because they do not cause disputes, or can be accounted for in terms of sensible properties, or because they do not exhibit compresence. Whatever we do say, it seems that we now have to answer the question whether in some respects particulars can be the objects of knowledge in the same manner as the (limited) Forms, or perhaps in a different manner. If one thinks that the phenomenon of compresence, especially as it afflicts sensible properties, is what impels Plato to discount what suffers from it as knowable, then one should count Socrates being a man as a knowable proposition.

Regardless of one's views about the range of Forms in the initial presentation in the *Phaedo*, *Republic* and *Symposium*, almost all agree that later dialogues reveal new concerns and show Forms utilized in new explanatory projects. (The nature of particulars also comes in for new treatment (see below).) The attention to language and method exhibited especially in the *Parmenides*, *Sophist* and other late dialogues leaves little doubt that Forms, or Form-like items, cannot be limited to incomplete properties. Precisely what we are to say about these Forms or kinds is, of course, a subject of debate.

To appreciate what is at stake, perhaps it is best to start from ideas promulgated by Ryle in his landmark study of the *Parmenides*. Ryle thought that Plato, when he better appreciated the nature of the statement, that is, the difference between naming and saying, and the more complex nature of knowledge that such an appreciation provided, abandoned his theory of substantial Forms wherein "abstract nouns are proper names and Forms are terms in relational propositions" (Ryle 1939: 10–11). Gone is the acquaintance-like account of knowledge of simple Forms found in the middle period and in its stead is something more akin to knowledge-by-description or propositional knowledge. The hypotheses of the *Parmenides* and especially the *Sophist*'s discussion of the interweaving of Forms (*Soph.* 254b8–257a11) show Plato at work on the notions of sameness, difference, being, unity and other syncategorematic notions. These "kinds" are not at all like the incomplete, or moral, or even natural kind Forms. Indeed they are not Forms but "the forms of the combinations of those elements (the terms/concepts) into propositions" (Ryle 1939: 18). Most readers don't follow Ryle in denying these greatest kinds any metaphysical standing. Rather, they are viewed as a special kind of property, namely those true of, or predicable of all Forms in virtue of the fact that something is a Form. (If there are beings other than Forms, it could be plausibly argued that they are true of all beings.) By the time of these late dialogues, then, Forms cannot be simple, or possessors of exactly one property, since each Form, for example, Justice, will be one, different from every other Form, the same as itself and so on for all of the kinds that qualify as "formal" forms, those predicable of Forms in virtue of the fact that they are Forms.

With increased attention on the complexity of Forms and these greatest kinds comes a host of new issues in Plato's later metaphysics. Three in particular seem to me to be most controversial. The first arises from the argument of the *Sophist* concerning not-being. As he pushes to conclude his effort to flush the sophist from his hiding place in not-being, Plato develops his account of false statement (*Soph.* 254c10–264b3, Frede 1992). Whatever the precise nature of that account, he appeals to the "parts of the Different" (*Soph.* 257c7–258e3). Assume whatever positive Forms or properties one thinks Plato is committed to. For each, there is a part of the Different set against it, such as the not-beautiful set against Beauty. The controversy concerns the status of these parts: are there negative Forms (Fine 1993: 113–16)? If so, are they entities in which particulars and other Forms can participate? Is the duckling not beautiful in virtue of partaking in the Not-Beautiful itself? If they are not eligible to be participated in, what drives their postulation as Forms? A related worry concerns the notions of cuts that are not kinds that Plato mentions briefly in *Politicus* 262a–e. If "barbarian" does not designate a kind but has a meaning or some semantic content, then perhaps Plato can be said to be considering an expansion of the realm of Forms or form-like entities to include properties/concepts even where there is no real kind. In other words, where there is a semantic one-over-many, a predicate in a language, also posit the Form to serve as the "referent" of that predicate.

The second, related controversy arises from Plato's method of collection and division, or the method of *diaeresis*. Starting in the *Phaedrus* and coming to prominence in the *Sophist*, *Statesman* and *Philebus*, this method searches for the exhaustive classificatory tree-like, genera/species structures in which each (substantive) Form can be displayed (*Phlb.* 16c5–17a5). The *Sophist* and *Statesman* suggest that a given notion, sophist or statesman, can be investigated or displayed in multiple, sometimes over lapping divisions. There is the expectation that one accurate and true definition of the target

item's essence will unify or reveal how the others are connected, or at least explain why one might think that the target admits of the various classificatory schemata (*Soph.* 231–2). Leaving aside issues about how relative to the interests of the inquirer any schema may be, the difficulty generated by the method concerns the ontological and predicational relations one Form stands in to the various Forms that figure in the various schemata. Consider the various elements of the definition that emerge at the end of the one true classification mentioned above. In the case of a natural kind, say man, let the definition be "rational, two-footed animal." First, what is the relation between the definition of man's essence and Man itself? Second, what is the relation between each of the "parts," for example, animal, and Man itself? No one thinks that (the later Plato thinks that) the Form of Man is an animal in the same way as is my cat Soltan. One possibility is that Plato thinks that Man is partially identical with animal, partially identical with rational(ity) and with two-footedness (Frede 1967). If we shrink from the notion of partial identity, it would seem that only the definition as a whole, the whole of the essence, is ontologically predicable of Man. All the other individual properties located at various branches of the structure, including the elements of the definition, are not ontologically predicable of the Forms or kinds, though they may well be linguistically predicable. In short, the diaereses generated by the method of collection and division map conceptual or linguistic relations: relations of compatibility and incompatibility (Cherniss 1944). Ryle's linguistic turn was the correct turn to take, even if it didn't lead quite to the abandonment of Forms. Forms survive as unities, not simples (Harte 2002). They have properties other than the unified essence, but they are limited to those properties marked as formal features of Forms, most vividly Goodness and Beauty, Unity, Likeness and Unlikeness and the *Sophist*'s greatest kinds, perhaps to include Motion and Rest.

The argument of the *Sophist* is also the source of the third new issue in the late dialogues. In the Battle of the Gods and Giants (*Soph.* 246a3–249d8) the Eleatic stranger offers a new mark (*horos*) of being, the power to affect or be affected (247d8–e4). Among the many questions raised in this section of the dialogue are whether this new account is actually something Plato wants (us) to endorse, or whether the mark is offered as a dialectical foil to advance the argument of the *Sophist*; whether in fact it is a new account of being such that new entities are included among the list of what is, or whether this mark is a different way of conceiving how the traditional entities qualify as beings; and what precisely is the outcome of the Battle with respect to the notions of motion and rest and what moves and what is at rest (Brown 2008). While space is too short to address these questions, its introduction provides a segue to the second part of this contribution. For at least part of what is at issue in the Battle is the nature of soul, and one of its principle activities, knowing. I shall return to the Battle shortly, after we have looked at some metaphysical aspects of the evolution of soul in earlier dialogues.

Forms and Souls

One hallmark of Plato's Platonism is his idea that Forms are transcendent universals. This is often captured by the notion of separation, or *chōrismos*. Forms are separate in that their being, or their being what they are, does not depend on there being any instances or instantiations of them (Fine 1993, Silverman 2002). Particulars depend on them. Forms are independent from particulars. A second type of separation would be the separation of each Form from any other Form. Perhaps the initial notion of a Form

as one, that is, that all Justice is is just, implies that each Form is separate from every other Form. Maybe by the time of the *Republic* (Goodness) and *Symposium* (Beauty), and certainly by the time of the *Parmenides* and the late dialogues, each Form cannot be one in this sense, since the many formal Forms are predicable of every Form. (Recall that Ryle argues that Forms have been abandoned by this stage.) If one thinks that Plato is committed to property-instances, such as the small-in-Socrates (*Phaedo* 102d5–103a3), there would be a third class of items from which Forms may or may not be separate (Devereaux 1994). Here one question would be whether form-copies emanate, to use a Plotinian notion, automatically and spontaneously as it were, without regard to whether there are particulars whose form-copies they are. Some might "attach" themselves to particulars, others might not. (Of special concern here would be how we are to understand Timaeus' appeal to *mimemata* of Forms entering and exiting the receptacle (*Ti.* 50c1–6).) Alternatively, one might think that form-copies are not only dependent on the Forms from which they derive, they are also dependent on the particulars to which each must be(come) attached in order to be.

Souls, however, raise a different worry about Forms. For if transcendence from particulars is the hallmark of Forms, objectivity comes a close second. Forms are objective in that they are not mind-dependent; that is, there would be Forms even were there no minds. In the strict sense, a Form will be mind independent if the account specifying what the form is, the definition of its essence, makes no mention of minds. Since the definition or linguistic account is something that minded creatures offer, it is important to separate the linguistic definition from the ontological counterpart that it picks out, namely the essence. The tension emerges when we consider that in the epistemological realm, Forms serve as intelligibles, items to be known. Either they are the only knowables, or they are the most basic knowables: that is, in so far as other things are knowable, their knowability somehow depends on Forms. Of course nothing is known unless there is a knower who actively knows. And although a Form could be knowable even if never known, it is difficult to see how one could assign to the Forms the job of grounding knowledge unless one had some view as to what knowledge is and what sorts of powers must be had by intelligence or intelligent agents. For Plato this amounts in part to the idea that souls are the agents that exercise knowledge. Thus, there is pressure to posit that along with the Forms there are intelligent agents, namely souls. The argument of the *Phaedo* highlights the tight linkage between arguments for Forms and arguments for immortal souls. Notice that while the intelligibility of Forms can be said to imply the presence of souls, there is no other relation between Forms and souls that would yet license us to think that souls are somehow dependent on Forms. It seems fairer say that, for Plato, Forms and souls are eternal constant companions.

Another aspect of the tension between the objectivity of Forms and souls/minds appears prominently in the account of limited Forms discussed above. The fact that all bearers of an incomplete property also, in some respect, exhibit the opposite of the property whose account is sought interferes with or limits cognitive access to the property. Here a sensing or intelligent agent is writ into the very cause for the positing of Forms. This may be only an aetiological account of how Plato came to posit Forms, without any commitment to agents. On the other hand, there is the danger that talk of the need for a paradigmatic item may be shorthand for an epistemological paradigm, in which case it seems that the nature of Forms cannot be specified without appeal to souls. This is occasioned by talk of Forms that must be non-sensible, though this is not to say that what it is to be a Form must mention intelligent agents (White 1992).

A different—though related—issue involving the relations between Forms and souls is what are sometimes called Cambridge changes. Cambridge changes are changes that can be said to befall an object in virtue of its relation to something else while it seems to suffer no change in its own right. A Form can come to be known by Socrates without itself undergoing any change. If we allow that known and not known are opposites, then it might seem that Forms too constantly suffer from the compresence of opposites provided that they are at some time not known and at some time come to be known.

A second feature of Plato's metaphysics that leads to the positing of souls is motion in the cosmos. Metaphysics does not require that there be motion, as Parmenides had made clear. But if one allows motion a place in the cosmos, then how to account for it becomes demanding. Plato does not make Forms directly responsible for any motions in the cosmos. Forms are apparently motionless and unchanging. In some fashion they may be able to cause motions, but not in virtue of the fact that they themselves are in motion. (The transmission account cannot be right in the case of motion.) Since there is motion, there is, by one over many reasoning, the need to posit a Form of Motion. But Plato does not introduce this Form until his later works. Rather, he seems to work with the idea that souls themselves are the source of motion in the cosmos. Initially in the *Phaedo* we find Plato committed to three aspects of soul that exercise him in the later works. The first is the idea that souls are immortal. The second, related point is that each of our individual souls is immortal. I do not believe that Plato, in the *Phaedo* or elsewhere, offers an explanation of how individual souls come to be individuated. The third notion is that souls, unlike material particulars, are metaphysically akin to Forms.

The metaphysical issues concerning souls are a microcosm of the difficulties confronting Plato's metaphysics. On a traditional and I think plausible reading of the metaphysics of Being and Participating, Forms in the *Phaedo* are metaphysically special: they are the true or perfect beings. Being, the way in which essence is related to or predicated of some subject, seems restricted to Forms. Only Forms *are* what they are. Particulars, in contrast, have their properties by partaking of Forms. Particulars are thus not able to *be* whatever they are. Particulars are essentially nothing (Silverman 2002). Individual souls seem to violate this stricture, however. They are not Forms, yet each soul not only appears to participate in the Form of Life, but each also seems to be essentially alive, necessarily to partake in or to Be alive (*Phd.* 105b9–107a1). In this respect, souls seem to be a unique kind. They are not Forms and yet they seem to be essentially something. Even were one to grant that in the *Phaedo* Plato allows that Socrates is essentially human, Socrates need not remain a human being. Socrates may perish, after all. Souls, on the other hand, are not only essentially alive, provided that they remain what they are, namely souls, but also individual souls cannot cease to be what they are. Despite the fallacious reasoning of the Final Argument, for Plato there is never a time when a soul fails or can fail to be a soul or fail to be alive. Phaedan Souls, then, are individuals who are essentially beings (or at least necessary participants in the Form of Life).

The only other items in the ontology that may share the features of being individuals that are essentially what they are are the so-called form-copies, or property-instances. These property-instances are controversial. In the metaphor of the *Phaedo* 102d5–e3ff, they are said to withdraw or perish. Many think that they perish when the individual whose instances they are lose the property of which they are an instance (Devereaux 1994). Part of the imaginative difficulty is that there seems to be no place for property-instances to go, as it were, were they to withdraw. We find it harder to think that form-

copies can withdraw somewhere than we do with the case of individual souls. I hazard to guess, however, that there is no marked difference in the prospects for form-copies and souls to withdraw. Individual souls, then, are both particular *and* essentially what they are, and they are like form-copies, provided that we allow that form-copies are primitively individual and they are always, and unfailingly, essentially instances of the Form whose name they bear.

Neither in the *Phaedo* nor elsewhere does Plato mention a Form of Soul by participating in which each soul comes to be a soul. Rather, each soul partakes and partakes necessarily in the Form of Life. Perhaps one reason to omit a Form of Soul is that the clever *aitia* of the Final arguments requires two related Forms, for example, snow and cold. One Form, The Alive itself, is a form-bringer, and the key to the clever *aitia* is the Form brought along, in the case of soul, Indestructibility. A third Form would overly complicate the account, that is, Soul would bring Life which in turn would bring Indestructibility. But there is, I think, a deeper problem. Soul enters the Final Argument as what brings life to whatever it belongs to. So, in virtue of the presence of soul, bodies are alive. When soul withdraws, the body is no longer alive. Were there a Form of Soul, the body would either have to partake of the Form of Soul in order to be alive, or the body would be able to bypass the soul as it were and directly partake of the Form of Life. The latter option seems impossible by Plato's lights. But the former also seems unlikely, since he has no way of accommodating the prospect that the body (or person?) comes to be soul. In this circumstance, it seems plausible to allow that the relation between soul and body or soul and person is not one of participation, nor of Being, but a third, *sui generis* relation, being present to, or part of, or an interpenetrating part of. Here souls are not only a special kind of individual, but their special metaphysical relation to their "bearer" anticipates some of the worries that Aristotle develops in his accounts of the relation of soul and body in his hylomorphic analysis and his development of the notions of actuality and potentiality.

By the time of the *Phaedrus* (245c–e) the Form of Life has disappeared and a new account of the nature of the soul is introduced. The analysis now appeals to the power or nature of the soul as self-mover. Though there are worries about the success of this argument in establishing the conclusion that souls are immortal, for the first time Plato ascribes an explicit metaphysical nature to the soul (Bett 1986). Soul is not some substrate or underlying thing that has self-motion, or even necessarily has self-motion, as the Phaedan soul seems necessarily to have Life. Rather a soul is a self-mover, or perhaps better, is self-motion. In the late dialogues, this nature of soul is constant. Because it is a self-mover, soul assumes the role of primary source of motion in the cosmos. Two features merit brief comment.

First, at least in the *Sophist*, Plato posits a Form of Motion. There is no little controversy over the Forms of Motion and Rest in the *Sophist*. Equally controversial is whether the relations or accounts of Being and Participating survive in the *Sophist* and other late dialogues. But assuming that we can speak of participating, it looks as though we again have a Form, Motion itself, in which souls at least would have to participate. In so far as there is physical motion, as the Giants and the Gods seem to allow, then it may also be that bodies participate in Motion Itself. (If the Form of Motion is a greatest kind it may also be that all Forms participate in it.)

A second issue is the double derogation of Motion Itself in the form of self-moving souls and the motions of bodies. One aspect of this problem is the sense in which the derogation is doubled. Plato has no compunction about having images of images, as the

Republic and *Sophist* make clear. (The statue is an image of Pericles, and Pericles is an image of the Form of Man.) It is unclear, however, especially in the *Timaeus* what the motion of the physical cosmos amounts to and whether it entirely depends on soul. The more challenging issue concerns the nature of soul as self-mover. It will not do to think of the soul as some kind of substrate of which self-motion is a feature. Souls just are self-movers. But this kind of identification of subject and definition seemed restricted to Forms. If Plato thus broadens the range of items for which an identity between the subject and its essence holds, then there is the possibility that in the late dialogues ordinary particulars at least in the natural kinds, that is, ensouled creatures, can be essentially whatever they might be. Socrates could be identified with his essence, Soltan my cat with his, and so on. This would yield a somewhat Aristotelian metaphysics and allow us to make sense of why Plato in the late dialogues spends so much time worrying about matters in the physical cosmos. Now particulars can make greater contributions to the epistemological enterprise as suggested by the method of collection and division in the *Phaedrus* and thereafter. Nonetheless, there remains a difficult aspect to the identification of soul and self-motion, namely the individuation of these souls. For the predication of essence of Form, or the identity of Form and essence, seems united with the generality or universality of Form. And if souls are self-movers, rather than things in self-motion, then it seems that they would not differ from one another qua their nature. Here we seem to face two options: either they get their individuality from another source, matter or some kind of history, or they are just primitively individual.

If we seek an item or factor by appeal to which we might individuate souls, we come naturally to particulars. In the works prior to the *Philebus* and *Timaeus*, there is almost nothing to suggest that Plato is prepared to give an account or analysis of ordinary particulars, or maybe more significantly, material particulars. We saw above that in the *Phaedo* and *Republic* he is ready to classify particulars as deficient in comparison to Forms, whether in their entirety, as Sun, Line and Cave imply, or with respect to only certain properties, as the limited account would urge. Regardless of how one stands on this possibility, it seems to most that souls, or embodied souls, are individuated by the company they keep: Socrates' soul is the individual it is because Socrates is an individual and lends his individuality to his soul, just as he lends his individuality to the form-copies that are his, as opposed to Plato's, the-wisdom-in-Socrates as opposed to the-wisdom-in-Plato. In any case, Plato is not prepared to offer any analysis of ordinary particulars until the very late dialogues.

Once he turns to the task, however, it is still unclear whether Plato allows that any material particular has any essential properties. Of prime importance in this regard is the status of the physics of the *Timaeus*. One problem is with the status of the account itself, that is, the *eikōs mythos* that is Timaeus' speech (Burnyeat 2005). Aristotle leads one column of those who take the creation story literally: they read Plato as contending that there is a coming into being of the cosmos: a cosmogony. Correspondingly, they read Plato as offering a cosmology that starts from primitive material bodies, themselves in motion. These bodies are the building blocks of all more complex structures. Before they can serve as constituents of any definite compound, however, they must be "perfected" through some mathematization. Xenocrates heads the other column of those who think that the *Timaeus* is "for the sake of instruction." Here there need not be any creation story that starts from primitive material particles or bodies in motion, since Plato doesn't think that the cosmos is created. While interpreters differ over the lesson, one version of this school of thought treats Timaeus' account as presenting what is left

of the cosmos when it is rationally deconstructed, that is, when all form, or all Forms, are removed from it. On this account, there need not be a commitment to primitive matter of any sort, though material bodies will figure in the account as a higher level factor in an analysis of material particulars.

Regardless of one's view of the question of the creation of the cosmos, the *Timaeus* explicitly introduces two "new" features of the physical world, the receptacle and mathematical, or better geometrical, elements, namely two kinds of triangles in varying sizes. These triangles serve as the basic elements of the well-formed cosmic bodies. For those who accept primitive matter, these become "perfected" earth, air, fire and water when given geometrical form. For those who deny primitive material bodies, the triangles are the most basic constituents, period. The receptacle, on the other hand, is agreed by all to be a primitive element or aspect of Plato's most sophisticated, final, ontology. Whatever its precise role—a dispute that can be settled only when one stakes a claim on one side or the other of the literalness question—Plato is emphatic that no nature can be assigned to the receptacle of the sort assigned to Forms, souls, or other elements in the ontology. As the nurse of all becoming, it cannot have a nature of its own lest it taint what comes to be in it. Whether, at bottom, particulars are anything over and above form-copies, or Forms, interacting with the receptacle, will determine whether at the end of his writings, Plato's special ontology will include anything other than Forms, the receptacle and souls. Much like the present day controversies over the relation of metaphysics to physics, one can settle on an account of Plato's Metaphysics only after one has decided what one makes of his cosmogonic and cosmological account in the *Timaeus*.

References and further reading

Bett, R. (1986) "Immortality and the Nature of the Soul in the *Phaedrus*," *Phronesis* 31: 1–26.

Brown, L. (1998) "Innovation and Continuity: The Battle of Gods and Giants in Plato's *Sophist* 245–249," in J. Gentzler (ed.), *Method in Ancient Philosophy*, Oxford: Clarendon Press: 181–207.

Brown, L. (2008) "The *Sophist* on Statements, Predication, and Falsehood," in G. Fine (ed.), *The Oxford Handbook of Plato*, Oxford: Oxford University Press: 437–462.

Burnyeat, M. (2005) "Eikos Mythos," *Rhizai* 2: 7–29.

Chalmers, D., Manley, D., and Wasserman, R. (2009) *Metametaphysics*, Oxford: Oxford University Press.

Cherniss, H. (1936) "The Philosophical Economy of the Theory of Ideas," *American Journal of Philology* 57: 445–456.

Cherniss, H. (1944) *Aristotle's Criticism of Plato and the Early Academy*, Baltimore, MD: Johns Hopkins Press.

Cherniss, H. (1957) "The Relation of the *Timaeus* to Plato's Later Dialogues," *American Journal of Philology* 78: 225–266.

Code, A. (1986) "Aristotle: Essence and Accident," in R. Grandy and R. Warner (eds.), *Philosophical Grounds of Rationality* Oxford: Oxford University Press: 411–413.

Dancy, R. (1991) *Two Studies in the Early Academy*, Albany, NY: State University of New York.

Dancy, R. (2004) *Plato's Introduction of Forms*, Cambridge: Cambridge University Press.

Devereaux, D. (1994) "Separation and Immanence in Plato's Theory of Forms," *Oxford Studies in Ancient Philosophy* 12: 63–90.

Fine, G. (1993) *On Ideas: Aristotle's Criticism of Plato's Theory of Forms*, Oxford: Clarendon Press.

Frede, M. (1967) *Prädikation und Existenzaussage*, Gottingen: Vandenhoeck and Rupprecht.

Frede, M. (1992) "Plato's *Sophist* on False Statements," in R. Kraut (ed.), *The Cambridge Companion to Plato*, Cambridge: Cambridge University Press: 397–424.

Harte, V. (2002) *Plato on Parts and Wholes*, Oxford: Oxford University Press.

Harte, V. (2008) "Plato's Metaphysics," in G. Fine (ed.), *The Oxford Handbook of Plato*, Oxford: Oxford University Press: 191–216.

Irwin, T. (1977) "Plato's Heracliteanism," *Philosophical Quarterly* 27: 1–13
Irwin, T. (1995) *Plato's Ethics*, Oxford: Oxford University Press.
Malcolm, J. (1991) *Plato on the Self-Predication of the Forms*, Oxford: Clarendon Press.
Meinwald, C. (1992) "Goodbye to the Third Man," in R. Kraut (ed.), *The Cambridge Companion to Plato*, Cambridge: Cambridge University Press: 365–396.
Menn, S. (1995) *Plato on God as Nous*, Carbondale, IL: Southern Illinois University Press.
Mohr, R. (2005) *God and Forms in Plato*, Las Vegas, NV: Parmenides Publishing.
Owen, G. E. L. (1953) "The Place of the *Timaeus* in Plato's Dialogues," *Classical Quarterly*, NS 3: 79–95.
Owen, G. E. L. (1957) "A Proof in the *Peri Ideon*," *Journal of Hellenic Studies* 77: 103–111.
Ryle, G. (1939) "Plato's *Parmenides*," *Mind* 48: 129–151 and 302–325; repr. in *Critical Essays*, Vol. 1, New York, NY: Barnes and Noble: 1–46.
Sedley, D. (1998) "Platonic Causes," *Phronesis* 43: 114–132.
Silverman, A. (2002) *The Dialectic of Essence*, Princeton, NJ: Princeton University Press.
Silverman, A. (2008) "Plato's Middle-Period Metaphysics and Epistemology," in E. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (URL = http://plato.stanford.edu/entries/plato-metaphysics/)
White, N. (1992) "Plato's Metaphysical Epistemology," in R. Kraut (ed.), *The Cambridge Companion to Plato*, Cambridge: Cambridge University Press: 277–310.

Related chapters

10. Plato on philosophical method: enquiry and definition
11. Plato's epistemology
12. Plato: moral psychology
23. First philosophy first: Aristotle and the practice of metaphysics
39. Middle Platonism
42. Plotinus
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16
PLATO'S COSMOLOGY

Andrew S. Mason

Introduction

Plato's cosmology is one of the most significant aspects of his thought, and one of those which have had the largest effects. He played an important part in making popular the idea of a creator God, which had not been widespread before his time, and also the view that natural objects in the world exist for a purpose. The first of these ideas was taken up by the Stoics, and the second both by them and by Aristotle, and so both ideas became widespread even before the rise of Christianity. Plato's major work on the subject, the *Timaeus*, was regarded as one of his most important works through antiquity and into the middle ages, when, unlike most of his writing, it was available in the West in a Latin translation; thus it played a major part in contributing to the widely accepted conception of Platonism.

There are some precedents for these ideas in writers before Plato. Anaxagoras (DK B12) claimed that *Nous* (Mind or Intelligence) was responsible for starting the process which brought the world into being. Diogenes of Apollonia (DK B3–4) believed in an intelligence which works in a providential way in the world, though the arguments of his which survive focus on the identity of this intelligence with air, the primary body in his system. There is also some evidence that Socrates himself believed in a creator God, since Xenophon's *Memorabilia* presents him arguing for this belief (Xen. *Mem.* 1.4.5–7 and 4.3.13). But these views were not widespread before Plato, and he played a central part in making them influential.

In two dialogues which are probably relatively early, there are passages which point to the idea of a creator without clearly affirming it. (Perhaps, in the light of Socrates' condemnation for introducing strange gods, Plato was at this point reluctant to explicitly ascribe to him unusual religious views.) In the *Gorgias* (Pl. *Grg.* 503d ff.) we are told that each craftsman keeps an end in view and tries to give an orderly form to his product; a little later (508a) we find that the universe itself is an example of such order, which is why it is called *cosmos* (order). This suggests, without clearly stating, that the universe is itself a work of craft. It is notable that whenever Plato mentions the creator, the term craftsman (*dēmiourgos*) or one of its cognates is used. Plato often uses the crafts as examples in making various points, and speaks in more than one place of craftsmen looking to Forms for guidance in their work (*Cra.* 389a–c, *Resp.* 596b); God is likewise seen, as we will find out in the *Timaeus*, as a craftsman guided by a Form.

The second place where the idea of a creator is hinted at is in the *Phaedo* (*Phd.* 97b ff.). There, Socrates describes his search for explanations of things, and looks back to Anaxagoras, who held that Intelligence played a central part in bringing the world into being.

Socrates claims that this would lead us to suppose that all things are ordered for the best, which is what intelligence aims at, and holds that, if this turned out to be so, it would provide a good explanation of why things in the world are as they are. He says, however, that Anaxagoras did not in fact come up with any such explanation, and Socrates himself has not been able to find one. While the claim that things were brought into being by Intelligence and are ordered for the best is not rejected, neither is it affirmed.

What seems to be the creator's first explicit appearance is found in the *Republic*, where he is briefly mentioned twice, as the craftsman of the senses (*Resp.* 507c) and as the craftsman of the heavens (530a). It is in Plato's later works, however, that the creator becomes really prominent. These works also often reveal a greater concern with the sensible world and with particulars, and it may be that Plato's growing interest in these topics also led him to take more interest in the maker of the world.

In each of the complete works commonly assigned to Plato's last period, there is a mention of the creator. The *Sophist*, as part of a classification of productive arts, mentions the divine production of the universe; that there is a divine maker is said to be demonstrable "with necessary proof" (*Soph.* 265b–e). The *Statesman* includes a mythic account of the relations between God and the world (*Plt.* 269c–273e), which refers to him as having brought it into existence in the beginning (269d). The *Philebus* has a somewhat cryptic argument for the claim that there is a cosmic intelligence which is in some sense the cause of the world (*Phlb.* 28c–30e). Finally the *Laws*, probably Plato's last work, contains in Book 10 an extended argument for the existence of gods and for the claim that they are worthy of worship; while it is largely concerned with gods within the cosmos, who are said to be responsible for heavenly movements, it also refers to a single cosmic ruler (called "the supervisor," *Leg.* 903b, and "our king," 904a), responsible for the order of the universe, who is compared to a wise craftsman (903c).

The *Timaeus*, however, whose main theme is the origin of the world, is the work in which Plato deals at greatest length with cosmological questions, and so it is on this work that we will focus from now on.

Plato's cosmology in the *Timaeus*

The *Timaeus*, after an opening passage of dialogue, takes the form of a continuous discourse by its title character, Timaeus, a visitor to Athens from Locri in Italy. (Socrates, though present, does not take the lead.) The official aim of Timaeus' discourse is to give an account of the origin of the world and of humanity (*Ti.* 27a); in a planned sequel another speaker, Critias, was going to continue with an account of ancient history (the Atlantis legend). But in fact Timaeus says much about the present makeup of the universe as well, giving an overview of physics and human biology as Plato understood them.

To begin with, Timaeus insists (28b) that the universe is not eternal, but came into being, and that it was produced by a god; indeed by the supreme God, who is often referred to simply as "the God." While he is not, as we will see, exactly like the God of traditional theism, he resembles him closely enough to justify calling him by the same name. He is also often referred to as the maker or craftsman (*dēmiourgos*) of the universe, and so in modern discussions is sometimes called the Demiurge. He is not, however, the only being to whom the term "god" is seen as appropriate; the world itself, being an immortal and intelligent living thing, is a god (34b); so are the heavenly

bodies (39eff.), and they, though made by the supreme God, go on to help in the work of creation (41aff.).

The term "craftsman" is especially appropriate for two reasons. First, Plato's God does not make the world out of nothing, but out of pre-existing matter; finding the material world in a disorderly state he resolves to make it into something orderly (30a). Second, he works by looking to a Form (29a), as human craftsmen are said to do elsewhere in Plato's work; taking this Form as a guide he tries to make the universe as like it as possible. (These are among the ways in which Plato's conception of God differs from that of traditional theism.)

In one way, however, the term "craftsman" is deceptive; what God makes is not something purely mechanical, but a living being with a soul of its own (30b, 34b–37c). The heavenly movements, as Plato understands them, show intelligence, and so life, without which intelligence is not possible. For this reason God is also sometimes referred to as "father" (28c, 41a).

Timaeus' discourse falls into three parts. The first (27d–47e) deals with the creation of the world as a whole, the formation of its body and its soul, followed by the production of the heavenly bodies. This incorporates an account of the origin of time, which is identified with the regular movements of these heavenly bodies. Next, the creation of the rational, immortal part of the human soul is described, and finally a beginning is made on the description of the human body, specifically the mechanism of vision. In describing this, however, Timaeus realizes that he needs to introduce new material into the discussion, and the second part of the discourse begins.

This second part (47e–69a) deals with the nature of the materials from which the world and the human body are made. It begins with a discussion of the ultimate substrate of the universe, the mysterious "receptacle of becoming," which is identified with space. Timaeus then goes on to introduce the four most basic kinds of body, the so-called "elements" of fire, water, earth and air, which he claims are constructed on the basis of a mathematical formula. He discusses at length the interactions of the elements, their movement, their different varieties, and finally their sensible properties.

The last section (69a–92c) deals with the construction of the human body, together with the lower elements of the soul (which, here as in the *Republic*, includes spirited and appetitive elements as well as the rational one). In order to fulfill the plan of creation, these must be mortal, so they are not constructed by the supreme God, but by his servants, the lesser gods, since we are told (41a) that everything made by the supreme God is necessarily immortal. In constructing the human body the gods make use of the physical elements described in the previous section, and exploit their various qualities.

The division of the *Timaeus* into sections reveals two kinds of cause which exist in the world, and two kinds of explanation which are associated with them; the distinction is explicitly drawn at 46c–e. On the one hand there are souls, which are capable of acting for a purpose; on the other hand there are material things, whose behavior is governed by necessity. When a thing is produced by an intelligent agent, a soul, it can be explained in terms of the purpose it serves, while when it is produced by material causes it is explained in terms of necessity; that is, as a necessary result of the nature and situation of the materials involved. Material things are referred to as "contributory causes" (*sunaitia*), and the explanations which relate to them as "secondary"; nevertheless they are essential to a full understanding of the world. When something is produced by an intelligent agent making use of material causes, both kinds of explanation are

relevant; a full explanation will refer both to a thing's purpose, and to the material processes which bring it about as a necessary result. (For fuller discussions of these two kinds of cause and of explanation see Morrow 1950, Strange 1985, Mason 2006. For the distinction between the cause (*aition*), that is, the thing which is responsible, and the explanation (*aitia*) see Johansen 2008: 473–4.)

How does this relate to the structure of the *Timaeus*? The first section, dealing with the structure of the world as a whole and the rational human soul, makes little mention of the materials of which the world is constructed, and the explanations it gives are primarily rational ones, in terms of purpose. The second section remains mainly at the material level and gives explanations in terms of necessity, showing how the behavior of the "elements" and their sensible qualities follow necessarily from their structure. Finally the last section, in which the gods use the elements in constructing the human body, gives explanations in terms both of purpose and of necessity. For instance, hair (76 b–d) has an explanation in terms of necessity: fire arising from the brain pierces holes in the skin of the head, and solid matter escapes through them. But the hair also serves a purpose, that of protecting the head.

The *Timaeus*: literal or mythical?

Two major problems of interpretation—perhaps connected—face the reader of the *Timaeus*. First, it presents the world as having been brought into existence at a specific point in time. Should we understand this literally, and suppose that Plato actually believed that the world had a beginning; or should we take it as purely mythical, Plato's way of expressing his beliefs about the persisting structure of the world? Second, *Timaeus* disclaims knowledge of the topics he talks about and describes his discourse as a "likely account" or "likely story." Why does he do so, and in just what sense should we see his account as probable?

We begin with the question of literal versus mythical readings. It seems that there has been disagreement on this matter from the very beginning, with Plato's own pupils taking different views; Aristotle (*Cael.* 2.10, 280a28ff., *Ph.* 8.251b14ff., and elsewhere) interpreted the work literally, while Xenocrates claimed that the narrative form was adopted "for the sake of instruction" (Xenocrates fragments 153–7 Isnardi). This disagreement persisted through antiquity (see Sedley 2007: 107n30), and has been revived in modern times; the mythical reading for a long time had the upper hand, though now, largely as a result of the work of Gregory Vlastos, the literal one has more support. (See Vlastos 1939 and 1964; also Hackforth 1959, and Sedley 2007: 98–107. The traditional view is expressed in Cornford 1937: 25–6, and elsewhere, and defended in Tarán 1971.)

Certainly Plato is capable of using the form of a mythic narrative to express views about persisting aspects of reality—one might cite the myth of the origin of human abilities in the *Protagoras* (*Prt.* 320d–322; probably not an expression of Plato's own view, but of one he was considering for the purpose of discussion), or that of the origin of writing in the *Phaedrus* (*Phdr.* 274d–275b). Indeed, on no reading can everything said in the *Timaeus* be understood literally; for instance when Timaeus states (*Ti.* 41d) that God produced the soul in a mixing-bowl, this is clearly a metaphor. On the other hand, the fact that the *Timaeus* is a narrative involving divine powers is not in itself a sufficient reason to treat it as mythical; if Plato did believe that the world was brought into existence at a time by a divine being, he had no choice but to present his views in this way.

Many arguments have been put forward for the claim that the *Timaeus* cannot be understood literally. Here I will mention only two, perhaps the ones which have received most discussion; one relates to time, the other to soul.

Timaeus says (38b) that time came into being along with the universe, which has therefore existed throughout all time. This, of course, is in itself consistent with the universe having had a beginning; one might believe (as many Christians have, following Augustine) that the universe came into being at the first moment of time, and there were no events prior to that. However, Timaeus refers (30a, 52d–53b) to a chaotic motion taking place before the universe was made; how, we may ask, could there be motion before time?

Still, it is possible to interpret what Timaeus says about time in a way which does not raise this problem. Time, for him, is not simply temporal succession, the sequence of moments which is implied by all motion. Rather, he identifies time with days, nights, months and years (37e), which are in turn identified with the movements of the sun and moon; the movements of the planets are also said to be time, though this is not commonly recognized (39d). Time, therefore, implies the presence of regular movements. We are told that God's motive for creating time was to make the world *more* like its eternal model (37c–d); although the world cannot be wholly unchanging, as truly eternal things are, it can at least change in a regular and intelligible way, and hence it can be called eternal in a sense, in that the pattern of its movements persists throughout time. It is for this reason that time is called "a moving image of eternity." None of this would be the case if time were a condition of all movements whatsoever; in that case creating time would make the world less like the eternal. (Vlastos argues along these lines in 1939: Sec. 3 and 1964: Sec. 3. A rather different interpretation, though supporting the same overall conclusion, is found in Mohr 1985.)

The second argument against a literal interpretation arises from Plato's conception of soul. In two other works, the *Phaedrus* (*Phdr*. 245e) and the *Laws* (896a), soul is defined as a motion which moves itself, and from this the conclusion is drawn that it is the source of all motion. The *Timaeus* also includes what seem to be allusions to the self-moving character of soul (*Ti*. 37b, 46d–e, 77c, 89a), and one might well conclude from this that there, too, soul is the source of all motion. If we suppose this, however, problems arise. Timaeus says (34b ff.) that God created the world's soul when he made the world, with the apparent implication that no soul was active in the material realm before this; but we are also told that, before creation, material things were in a state of chaotic motion. If soul is the source of all motion, how could this be?

One possible answer—proposed in the ancient world by Plutarch (*De Procreatione Animae in Timaeo*)—is to argue that the origin of the world's soul is not the origin of soul as such; soul of some kind was, after all, present in the primeval chaos. But God is described (*Ti*. 30b) as creating the world's soul for a reason—because without soul intelligence is not possible, and intelligence is a good which he wanted the world to possess—in a way which implies that soul was not present before. A more plausible solution may be that Plato at least considered the possibility that material things are, after all, capable of motion in the absence of soul.

The claim that soul is the source of all motion does not follow at once from the claim that self-motion is a defining characteristic of soul; it is derived from it in the *Phaedrus* and *Laws* with the help of assumptions which may be questioned. It does seem reasonable, on Platonic assumptions, to hold that if motion can be traced to a source at all this must be a self-mover; Plato certainly seems to have held that whatever moves is moved

by something, and he does not have the concept of an unmoved mover; hence, either something moves itself, or it is moved by an external cause, and cannot be a *source* of motion. But can we be sure that all motions can be traced to a source? Perhaps Plato is here prepared to accept a series of motions going back infinitely into the past; in this case there is no need for a psychic source. Although no single material object moves itself, the material realm as a whole may still be in motion of its own accord.

What positive reasons might there be for adopting a broadly literal reading of the *Timaeus*? Here I will mention two. The first (proposed by Vlastos 1964: Sec. 1 and Sedley 2007: 101–3) is simply that Timaeus *argues* for the claim that the world had a beginning (28b–c). Elsewhere, when Plato wants to treat some subject in mythic form, the speaker often refers to a story he has heard, or the like. Here, by contrast, we are emphatically told that the universe was generated; this is contrasted with the view that it has always existed, which is rejected. The world, it is argued, must be generated because it is visible and tangible, and all such things are generated; from this, in turn, Timaeus derives the claim that it must have a cause.

It is true that these claims could, in isolation, be interpreted in different ways (so Cornford 1937: 24–7 and 34–9). The statement that the universe was generated might be read as meaning, not that it came into being at a time, but that it is always in process of becoming; that is, it is involved in constant change in a way which implies its becoming something new at every moment. The claim that it has a cause (*aitia*), given the wide range of things to which that term could refer in antiquity, might refer not to a cause which brought it into being in the beginning, but to some other kind of explanatory principle, perhaps a sustaining cause, or something which moves the world as an ideal, like Aristotle's unmoved mover. But when Timaeus argues *from* the world's being generated *to* its having a cause, the natural interpretation is that it had a beginning and so (according to a principle which has been widely accepted in many periods) must have an originating cause. The way in which, in the immediately following lines, the cause is described as a maker and father supports this.

It is reasonable to think that, for Plato, every sensible thing must have a beginning. Certainly, it does not follow from this that the totality of sensible things had a beginning; and indeed, if we accept that Plato believed in a precosmic chaos, he did not think this. The cosmos, however, even though it encompasses the whole realm of material things, cannot simply be identified with that realm; it is a thing with a definite structure, associated with a specific process, orderly and rational motion. Hence, it is plausible that Plato saw it as having a beginning, as other individual sensible things do.

The second reason for accepting a literal reading of the *Timaeus* relates to the motive of creation. We are told that God was good, and, being good, was not envious and desired everything else to be good; so, finding the material realm in a state of disorderly and unharmonious motion, he set out to make it orderly (29e–30a). This implies that the material world had some existence, and was in motion, independently of God's action. There is no suggestion of an "overflowing love" which would bring good things into existence out of nothing (as proposed by Taylor 1928: 78); it is because there already existed something which was in a bad state that God had reason to act.

This need not, strictly, force us to accept that the world came into being at a time; one might argue that there exists an element in the world which is independent of God, and potentially disorderly, so that he has to act to sustain order in it, but that it never actually existed separately from the order produced by God. If such a potentially disorderly element exists, however, the chaotic state described by Timaeus is a least a

possibility, and it is not clear why we should rule out the claim that it once existed. Many of the objections to the literal reading turn on the thought that this state is impossible for some reason, for instance because it involves motion going on in the absence of time, or of soul; those who accept these objections, therefore, tend to see the disorderly motion as a by-product of the orderly motions produced in the cosmos by reason. But if it is seen in this way, the motive of creation disappears.

It is worth noticing that, as Hackforth (1959) points out, most thinkers up to Plato's time did see the universe as having a beginning, though they generally supposed that material things existed in some state before that, and some of them also saw the generation of the universe as part of a cyclic process, with other universes before and after it. (Hackforth excludes Heraclitus, but in fact even he may have held a cyclic view; he says, at fragment DK B30: "This cosmos always was and is and will be," but "cosmos" may here refer to the cycle of generation and destruction rather than to the universe as now constituted.) The idea of the world having a beginning would not have seemed surprising to Plato's contemporaries, and they would have had no immediate reason to suppose that he did not mean it seriously.

Why, then, did many Platonists interpret the *Timaeus* in a non-literal way? The answer would seem to be that they worked out their own philosophy by interpreting that of Plato; seeing various problems in the view that the world had a beginning, they abandoned that view, but, wanting to remain loyal to Plato, they argued that he need not be read as genuinely committed to it. It is significant that Aristotle refers to the claim that the idea of a beginning in time was introduced "for the sake of instruction" as a *self* -defense (Xenocrates fragment 153 Isnardi = Arist. *Cael.* 1.10, 279b32ff.); it is the commentator Simplicius who identifies its author as Xenocrates, arguing in defense of Plato's *Timaeus* (Xenocrates fragment 154 Isnardi = Simpl. *in Cael.*303). Facing objections to the idea of a beginning, arising, in this case, from the argument that what is generated must also be destroyed, he argued that it should be seen as a means of exposition rather than as meant literally; by doing so he defended both himself and his teacher.

Timaeus's "likely story"

We may now consider the second major problem of interpretation, which arises from Timaeus's statement, at the beginning of his discourse (29b–d), that he cannot give a completely accurate account of the origin of the universe, but only a "likely account" (*eikōs logos*) or "likely story" (or "myth:" *eikōs muthos*). This is explained as one which is like the truth; in calling it "likely" he is not making a purely epistemological point (that we have good reason to think it is right, though it might, just possibly, be completely wrong); rather, we can be sure that it approximates to the truth, but not that it is correct in detail.

This has sometimes been taken to support the non-literal reading of the *Timaeus*: but in fact Timaeus's point here seems to be a different one. His account is conjectural, and he cannot guarantee it is correct, but it is the best account he can give; it aims at literal truth, though it may not have achieved that aim. On a non-literal reading, we can be certain that some aspects of the account are false; this does not seem to be what Timaeus is claiming (see Vlastos 1939: Sec. 1).

We may ask, though, why Timaeus does disclaim certainty. (This issue is discussed by Sedley 2007: 110–13, and by Burnyeat 2005, among others.) His reason for doing so

seems to arise from two aspects of the material world. First, implicitly, it is changeable; it is contrasted with stable things, the objects of reason, of which stable accounts can be given (29b). Second (29c), it is an image, made in the likeness of something else (the Forms); this is explicitly connected with the fact that the account we give of it is a likely one.

In many cases, it is not unreasonable to hold that we cannot have certain knowledge of changeable things. Particular facts about the changeable will at some point cease to be true, and can then no longer be verified; while general facts about the changeable, if known through perception, are always subject to refutation; an instance may always turn up which refutes them. This may lead us to think that the only things that can be known with absolute certainty are those unchanging truths that are grasped by pure reason; for Plato, these are truths about Forms. (This is not to say that we should adopt an attitude of radical doubt about the material world, just that it does not reach the highest standard of certainty.)

One might think, however, that, if material things are images of Forms, we can after all know something about them with certainty; at least about the unchanging features of them in virtue of which they image Forms. For instance, knowledge of the Form of fire might enable us to gain knowledge of the structure of fire in the material world. Why does Timaeus not allow this?

One possible answer lies in the thought, found elsewhere in Plato's work (*Cra.* 432a–c), that nothing is ever a perfect image of something else; if it were exactly like the thing it images, it would not be an image at all but another example of the same kind of thing. Since any image is imperfect, we cannot read off an account of the image from one of the original; while many features of the image are owed to the original, there will also be differences. This explains why an account of an image will be *like* the truth; knowledge of the original will guide us in giving an account of the image, ensuring that our account falls within the right area, but cannot ensure that it is right in every detail.

A claim made later in the *Timaeus* (*Ti.* 52c–d) gives some explanation of why this might be so. Every image, Timaeus claims, must exist in something other than itself; it must have a medium. The passage is rather obscure, but the reason for this seems to be that an image is something essentially relational; it is constituted by its resemblance to the original of which it is an image. But resemblances are not the sort of things that can exist all by themselves; there must be something which bears the resemblance. Thus, for instance, an image of Socrates might exist in various media, for example bronze or clay; but there could not be something that was just an image of Socrates and nothing else; there must always be a medium, and some of the qualities of the image will be affected by the medium. As the medium affects what qualities the image can have, it cannot perfectly resemble the original, and its qualities cannot be simply read off from those of the original.

The medium in which the universe exists is introduced at 48e ff., in rather cryptic terms, as the "receptacle of becoming"; after various attempts to explain this in metaphorical terms, it is finally identified with space (52a). This is not something we perceive directly, but neither is it grasped by pure reason; rather we infer its existence by a kind of "bastard reasoning" from that of the things which exist in it. It seems that we are never aware of it in isolation, but only as a medium for the existence of sensible things (52b ff.). This would seem to imply that space is not a Form, nor is there a Form of space; so purely rational reflection on the nature of reality will not tell us that it must be spatial. Since the images of Forms which exist in the actual world are spatial in nature, they have specific qualities derived from the medium; the nature of the medium constrains the kind of bodies which can exist in it, which in turn constrain the kinds of

living things which can be created. Perhaps the same Forms might have images in other media, which would embody them in a different way.

Pure reason therefore cannot by itself tell us the structure of the sensible world; we need to use perception as well. Pure reason might, in principle, tell us something about what any rationally ordered world must contain, but it would not give us enough information to derive a full account of the world as we see it. It seems, then, that Timaeus must work with one eye on the phenomena; he tries to give an account which will reflect the kind of truths we know through reason, but will also explain what we see. He is convinced that the world, being a copy of an intelligible reality, is ordered in the best way possible. But he does not simply try to work out what the best possible world would be like; rather, he tries to explain the *observed* facts in such a way as to show how they can be the effects of a good ordering. He is indeed guided, as he mentions at a number of points, by considerations of beauty; but he is seeking, not simply the most beautiful possible world, but the most beautiful account of the world we have.

A good example of this kind of reasoning is found in his discussion of the four primary bodies (commonly called "elements"), earth, air, fire and water (53b–56b). He begins with the observed fact that these bodies exist, and that some of them at least can be transformed into one another (49b–c: "we see, or think we see … "); but he also holds, as a matter of principle, that they are ordered in the most perfect manner possible. He forms the hypothesis that each of the bodies is composed of particles of a distinct shape, and that the structure of these particles is such as to allow transformation to take place. He introduces this claim by saying:

> We must say what are the four most beautiful bodies, unlike one another, such that some of them can be generated from one another when they are dissolved.
>
> (53d7–e2).

The facts that there are four and that they can be generated from one another come from observation; but the demand that the bodies be the most beautiful is a rational one. Timaeus goes on to propose that four of the five regular solids—the cube, pyramid, octahedron and icosahedron—will satisfy this requirement. Their regularity is a source of beauty, and three of them at least have sides of the same form—equilateral triangles—which allow them to be broken down into parts and reassembled into new forms. (The exception is the cube.)

Having described the four solids and the mechanism by which transformation can take place, Timaeus goes on (55dff.) to raise the question which of them should be identified with which element. The cube, for instance, is assigned to earth because it is the most stable; the pyramid to fire because it is both the most mobile and the one with sharpest edges, accounting for the "cutting" effect of fire. Here, once again, he is arguing from an empirical point of view, appealing to the observed qualities of earth and fire. Purely rational arguments may be able to tell us, to some extent, what constituents the universe must contain; but they cannot tell us just how this relates to our experience.

Argument and explanation

These passages are relevant to a question which has recently been a topic of discussion; to what extent is Plato in the *Timaeus* reasoning empirically? Sedley (2007: 109) argues

that he is not primarily doing so; he is simply trying to work out the consequences of the claim that the universe has a rational creator, by seeing what such a creator would produce, though the fact that what he discovers fits the empirical data no doubt has a confirming force.

Much of the *Timaeus* consists of claims of the form "things are arranged in such and such a way because … " where what follows the "because" includes some appeal to the good. This can be ambiguous; "because" can introduce either an argument, a reason *for thinking* that something is true, or an explanation, a reason why it *is* true: sometimes, but not always, the same considerations can serve as both at once. It is clear that often Timaeus is giving explanations in terms of the good; he is stating the reasons why God chose to create things in a certain way. Is he also giving arguments?

To some extent he certainly is; for, if we make the assumption that the world is ordered in the best possible way, the fact that an arrangement is a good one is a reason for believing that it exists. We have seen an example of this with the four elements; the fact that certain solids are the most beautiful is a reason for thinking that they were used in the construction of the world. However, it may be that this aspect of Plato's thought is sometimes exaggerated; we need not suppose that, every time he explains a phenomenon in terms of the good, this is also his reason for thinking it exists; that he works out the structure of the world purely on the basis of the assumption that it is ordered for the best, without reference to observation.

For instance, at 33bff. Timaeus presents reasons why God gave the universe a spherical form; all these reasons relate to the good. First, it is appropriate that the universe should be spherical, since the universe contains all bodies, and all the geometrical solids can be inscribed in a sphere. Second, the sphere is the shape which has the greatest uniformity—each of its parts is like all the others—and likeness is more excellent than unlikeness. Finally, the universe has no need of external organs which would distort its shape, since it has no need to perceive, feed, defend itself etc.

Timaeus is sometimes taken here to be *arguing* that the universe is spherical, on the grounds that this is the most perfect form, but he need not be read that way; we can suppose that he initially believed this on empirical grounds. When we look up at the sky, it looks like a spherical vault, and the stars at night seem to be arranged in a spherical form. Timaeus may then be seen as seeking to *explain* this fact in terms of its goodness.

The assumption that the world and its maker are good clearly constrains much of what Timaeus says about the particular contents of the world, but how does he reach that assumption? At the beginning of the discourse (28c) there is an argument for the claim that the universe has a cause, but not for the claim that that cause is an intelligent one, and more specifically a rational and good one; this, as Sedley points out, is simply assumed, and we are told that it would be blasphemous to say otherwise (29a). But implicitly it may be seen as following from the observed beauty of the world, which, explicitly, is used here along with the goodness of the creator as support for the claim that the universe was copied from an eternal model.

Later in the *Timaeus* (46d), we do find an argument that the primary causes of things in the universe are found in soul rather than in body; it turns on the thought that only soul is capable of intelligence and of acting for a purpose; bodily things, because they are governed by necessity, are not. This argument will be persuasive only if we already know that some things in the universe do serve a purpose, a knowledge which we may well see as derived from experience. It is therefore not unreasonable to see the various examples of purpose in nature which are given in the work—to do both with heavenly

phenomena, and with humans and their environment—not only as workings out of the conviction that the universe is rationally ordered, but also as reasons, based on observation, for forming this conviction.

In the same way, in the *Laws* (898a–c), the claim that the ruling powers in the universe are good and rational ones is argued for on the basis of the circularity of the heavenly movements, since Plato sees circular motion as the most rational of motions. For this argument to work, the circularity of the heavenly motions has to be regarded as an observed fact, not just as something inferred from the basic assumption of rationality. Here, rather more explicitly than in the *Timaeus*, we have an argument from an observed state of affairs to the rationality of the cause; but it is not implausible that a similar kind of reasoning underlies the *Timaeus* as well.

Eudoxus, who at one time seems to have been a colleague of Plato's in the Academy, is credited with working out the first theory which gave a systematic explanation of the heavenly movements (Arist. *Met.* Λ.8 1073b17ff.), and this theory could be seen as giving empirical support to Plato's view that they are produced by reason. Of course, once the conviction that the world is rationally ordered had been formed, it would affect Plato's interpretation of the evidence, making him more disposed to look for facts that would fit in with the assumption of rationality; indeed there is a story that he encouraged his colleagues to search for an account by which the heavenly movements could be explained as regular, thus inspiring Eudoxus to produce his theory (Simpl. *in Cael* 488). Nevertheless, he need not be seen as arguing in a purely a priori way; while his theory does guide the interpretation of the evidence, the evidence in turn helps to form the theory.

Perfection and imperfection

We have seen that the medium in which the universe is made sets limits to our knowledge of it. Does it also set limits to its perfection? The receptacle constrains the kind of bodies that can exist in the world, and these in turn constrain the possibilities for achieving good ends; but does this mean that the outcome is less than perfect? Traditionally it has been supposed that it does; that the "necessity" which governs the behavior of material things resists the power of the creator to some extent, leaving an element of disorder which he cannot eliminate. More recently this has been challenged (see for instance Sedley 2007: 113–27): it is argued that God's control is complete, and that matter should not be seen as "intransigent" or "recalcitrant," as it traditionally has been.

A passage which is often seen as illustrating the limits which matter imposes on the creator is 75a ff., dealing with the construction of the human head. According to this passage, it was impossible to combine thickness, which would give greater protection, and sensitivity; this is why the bone and flesh of the head, in order to achieve maximum sensitivity, are thin, with the result that life is shorter than it might have been. Sedley points out (2007: 121) that any craftsman would be forced to make such compromises on occasion, whatever the nature of his materials; for instance it might happen that there was one reason why it would be good for the head to be round, and another why it would be good for it to be square, and yet these aims cannot be fulfilled at once. Yet in the actual case which Timaeus presents, it seems that the problem which faces the makers is not a logical constraint—we can certainly conceive of a covering which can give both sensitivity and protection—but arises from the nature of the materials involved.

It is true that the makers (at this point the lesser gods rather than the creator) achieve the best thing possible in the circumstances, and so that the disadvantage involved—a shortening of life—exists for a good purpose. But the fact that the good purpose requires this is itself evidence that there is a limit on the powers of intelligence, imposed by something external.

It is difficult to judge whether this is evidence of the "intransigence" of matter, because it is unclear just what this would involve. Certainly matter does not actively oppose the creator; that would imply its having aims or intentions, which Timaeus seems to deny (48d); at most it behaves in ways the creator does not desire. Yet it does seem that the nature of matter makes it impossible to achieve some good ends, or makes it necessary that some harmful things will come about. This should not be seen as a misfortune arising out of the fact that the matter of this universe is particularly troublesome; rather it is a consequence of the very project the creator is involved in; every world must exist in some medium, and this will impose constraints on the goods that can be achieved. A world existing in another medium, we may suppose, might include goods that do not exist in this world, but in that case there would be other compensating evils.

It is significant that at 48a Timaeus says that intelligence persuaded necessity—the nature of the material element—to guide *most* of the things that come to be towards the best. This would seem to imply that there remain some things which are not for the best; that there is not just an element of mutability, which as Sedley (2007: 118–9) argues could be seen as itself part of the divine plan, but an element of evil. We should also notice the *Statesman*, where—though in a mythical context—we are told explicitly that the material element is a source of evil in the world, because of its tendency to disorder (*Plt.* 273b–d); though there again the creator is able to contain and control the evil, this involves the bringing about of cataclysmic changes in the world, which would not otherwise be desirable.

It may in the end be hard to distinguish between the claims that the material element merely limits the good that can be achieved, and that it produces positive evils which are nevertheless contained. Certainly we need not suppose that there are some parts of the universe or events in it which God does not control at all, for every event can be seen as in some sense part of his plan; nor that God aims at things which he cannot achieve, for his aim is to make the universe as good as *possible*, and that, it seems, is achieved. The *Timaeus* is to a large extent a celebration of the goodness of the world, ending at 92c with the claim that "its grandness, goodness, beauty and perfection are unexcelled." Nevertheless the work also seems to recognize the world's limitations.

References and further reading

References

Allen, R. (ed.) (1965) *Studies in Plato's Metaphysics*, London: Routledge and Kegan Paul.

Burnyeat, M. (2005) "*Eikōs Muthos*," *Rhizai* 2: 143–165, reprinted in C. Partenie (ed.) (2008) *Plato's Myths*, Cambridge: Cambridge University Press: 167–186.

Cornford, F. (1937) *Plato's Cosmology*, London: Routledge and Kegan Paul. (A translation of the *Timaeus* with commentary.)

Hackforth, R. (1959) "Plato's Cosmogony (*Timaeus* 27d ff.)," *Classical Quarterly* 9: 17–22.

Johansen, T. (2008) "The *Timaeus* on the Principles of Cosmology," in G. Fine (ed.) *The Oxford Handbook of Plato*, Oxford: Oxford University Press: 463–483.

Mason, A. (2006) "Plato on Necessity and Chaos," *Philosophical Studies* 127: 283–298.

Mohr, R. (1985) "Plato on Time and Eternity," in R. Mohr (ed.) *The Platonic Cosmology*, Leiden: Brill:

53–84; reprinted in R. Mohr (ed.) (2005) *God and Forms in Plato*, Las Vegas, NV: Parmenides Publishing: 51–80.
Morrow, G. (1950) "Necessity and Persuasion in Plato's *Timaeus*," *Philosophical Review* 59: 147–163, reprinted in R. Allen (ed.) (1965) *Studies in Plato's Metaphysics*, London: Routledge and Kegan Paul: 402–438.
Sedley, D. (2007) *Creationism and its Critics in Antiquity*, Berkeley, CA: University of California Press.
Strange, S. (1985) "The Double Explanation in Plato's *Timaeus*," *Ancient Philosophy* 5: 25–40.
Tarán, L. (1971) "The Creation Myth in Plato's *Timaeus*," in J. Anton and G. Kustas, (eds.) (1971) *Essays in Ancient Greek Philosophy*, Albany, NY: State University of New York Press: 372–407.
Taylor, A. (1928) *A Commentary on Plato's Timaeus*, Oxford: Clarendon Press.
Vlastos, G. (1939) "The Disorderly Motion in the *Timaeus*," *Classical Quarterly* 33: 71–83, reprinted in R. Allen (ed.) (1965) *Studies in Plato's Metaphysics*, London: Routledge and Kegan Paul: 379–401; and in G. Vlastos (1995) *Studies in Greek Philosophy Volume II: Socrates, Plato and Their Tradition*, Princeton, NJ: Princeton University Press: 247–264.
Vlastos, G. (1964) "Creation in the *Timaeus*; Is It a Fiction?," in R. Allen (ed.) (1965) *Studies in Plato's Metaphysics*, London: Routledge and Kegan Paul: 401–419; reprinted in G. Vlastos (1995) *Studies in Greek Philosophy Volume II: Socrates, Plato and Their Tradition*, Princeton, NJ: Princeton University Press: 265–279.

Further reading

Freeland, C. (2006) "The Role of Cosmology in Plato's Philosophy," in H. Benson (ed.) *A Companion to Plato*, Malden, MA: Blackwell: 199–213.
Gregory, A. (2000) *Plato's Philosophy of Science*, London: Duckworth. (A discussion of the *Timaeus* from an epistemological point of view.)
Johansen, T. (2004) *Plato's Natural Philosophy: A Study of the Timaeus-Critias*, Cambridge: Cambridge University Press.
Mason, A. (2010) *Plato*, Durham: Acumen. (Chapter 8 is concerned with Plato's cosmology; the discussion of the soul and self-motion in Chapter 5 is also relevant.)
Sorabji, R. (1983) *Time, Creation and the Continuum: Theories in Antiquity and the Early Middle Ages*, London: Duckworth. (Chapter 17 includes a discussion of the question whether Plato believes in a literal beginning.)
Vlastos, G. (1975) *Plato's Universe*, Oxford: Clarendon Press. (See especially Chapter 3, which includes an interesting discussion of Timaeus' disclaimer of knowledge.)
Zeyl, D. (2000) *Plato: Timaeus*, Indianapolis, IN: Hackett. (Translation and commentary.)

Related chapters

2. The early Ionian philosophers
4. Anaxagoras and Empedocles in the shadow of Elea
6. Pythagoreans and the Derveni papyrus
15. Plato's metaphysics
22. Aristotle's philosophy of nature
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17
PLATO'S POETICS

Gabriel Richardson Lear

No discussion has done more to shape Western thinking about art than Plato's analysis in the *Republic* of poetry as *mimēsis*—often translated "imitation" but more fruitfully thought of as image-making. (Many scholars leave *mimēsis* untranslated so as not to beg any questions in advance.) His analysis allows him to examine both the way poetry represents the world and the way it gives voice to the souls of poet and audience. But the conclusions which Plato has Socrates draw are so hostile that one might think they discredit his theory altogether. We might protest that the impulse to story-telling needs no defense. Straightforward assertion is fine, but stories are more pleasant (*Protagoras* 320b). As we will see, Socrates agrees. He allows the value of a certain form of *mimēsis* precisely because of the beneficial nature of its pleasures, but, he argues, the mimetic practices of the greatest Greek poets exploit the sweetness of poetry in a way that both expresses and creates a corrupt soul. This is a challenge that goes to the heart of the Archaic poets' claim to benefit with their honeyed words (Liebert 2012). It is also a challenge relevant to our own life with the arts.

Plato does not always frame his discussions of poetry in terms of *mimēsis*. Rather, he develops his theory of *mimēsis* to analyze problems that he raises independently of that concept. So we begin with a brief examination of two dialogues that discuss poetry without invoking *mimēsis* before turning to the magisterial account of the *Republic*.

Ion and *Phaedrus*

In the *Ion*, the only dialogue devoted solely to poetry, Socrates questions a Homeric rhapsode about the origin of his artistic ability. At first he assumes that Ion possesses a specialized body of knowledge, a craft—how else could he speak so beautifully?—but ultimately concludes that he speaks from inspiration, a condition in which his mind is displaced by a divine power (534a–b). Ion is delighted with this conclusion. Compared to being thought knowledgeable, "it's much more beautiful to be thought divine" (542b; all translations from Cooper 1997.) Readers sometimes wish Plato had depicted Socrates examining a poet, as in the *Apology* he claims to have done (22b–c). But the fact that rhapsodes inevitably speak words composed by someone else makes Ion a perfect exemplar of the condition of alienation that Socrates here attributes to all (human) poetic speech and experience. In a striking image, he describes poets, rhapsodes, and audience as a chain of iron rings magnetized by the Muses' divine charge.

Notice first the curious way Socrates conceives of what a rhapsodic craft would be. Scholars are uncertain whether rhapsodes only recited poetry or also gave speeches about it (Nagy 2002). But the answer to this question does not matter for our purposes.

Ion's rhapsodic power somehow or other concerns the *beauty* of poetic speech. So if rhapsody is a craft, it ought to be knowledge of what makes poetic composition beautiful. Instead, Socrates assumes that rhapsodic craft is knowledge of the activities poetry depicts, for example, fighting battles, tending to wounds, and so on (531c–d). This makes it easy to demonstrate that Ion does not have the craft in question, since there are a host of other crafts that already deal with these activities (for example, generalship, medicine) to which Ion cannot plausibly lay claim.

We may worry that Socrates has simply missed the point that poetic expertise, if such exists, is knowledge of beauty in verbal style. But if he has misunderstood, this is not because he has neglected the centrality of beauty to poetry. On the contrary, Ion's ability to speak beautifully is the very thing he wants to understand. It's just that he thinks speech is beautiful only if it is true. "Speaking well," "speaking correctly," and "speaking beautifully" are, for him, synonyms (537c–538d) and so, in every domain of life, it is the craftsman with practical knowledge who is best able to judge beautiful speech on that topic (538a). Ion's ability to interpret the beauty of Homer becomes, in Socrates' conception, an ability to draw attention to and, perhaps, truly explain the truth in what Homer says.

Socrates' argument depends on his assumption that the power to speak beautifully is the power to speak truly. But is truth the correct criterion of poetic beauty? And is this a point on which Socrates and Ion (and the judges who award him prizes) agree? In this regard, it is interesting to note that Ion praises Socrates' lengthy speech about poetic inspiration while at the same time denying its truth. He was almost taken in by it but, he says, it would take a better speaker than Socrates to persuade him that he is out of his mind when he performs (536d). The criterion of beauty as Ion sees it, then, seems to be not truth but persuasiveness, the ability to speak words that seem right regardless of whether they actually are. It turns out that this is precisely the skill Ion claims for himself.

When he gropes for the specific subject matter of his craft, Ion suggests that rhapsodes have knowledge of "what befits a man or a woman to say—or for a slave or a freeman, or for a follower or a leader" (540b). Socrates interprets Ion's professed knowledge of "what befits a leader" as knowledge of what a good leader would in truth say regardless of how his speech seems to others. But another interpretation of appropriate speech is in the offing: Ion, like Homer before him, is good at making heroes sound as we feel they ought to sound. Some of the most rousing poetic speeches—think of Sarpedon's speech to Glaucus in the *Iliad*—are imprudent when considered as real words spoken by leaders on the field of battle, but they are no less (apparently) heroic for all that.

What we see is that Plato presents poetic speech as a form of rhetoric, a practice that aims not at truthfulness but at persuading the masses (cf. *Grg.* 501e–502d; *Resp.* 492b–c, 493c–d). As Socrates emphasizes, Ion elicits emotional reactions in his audience of "millions" that are contrary to what anyone in his right mind knows is appropriate to their actual situation (535d). We might want to make a sharp distinction between the persuasiveness of speech *qua* fictional and the practice of making dubious assertions seem realistic, but Plato is interested in the way both poets and orators draw us in independently of, even contrary to, what we take to be true.

Socrates suggests that poetic persuasiveness is a function of pleasure. In the grip of divine possession, poets "gather songs at honey-flowing springs" and "bear songs to us as bees carrying honey, like flying bees" (534b). Plato's depiction of Ion confirms this analysis. Consider, for example, Ion's boast that he "dresses up" Homer: the verb he uses

is one Socrates had just used to describe the way Ion ornaments himself with cosmetics and beautiful clothes (530b–d). Plato suggests that Ion's speaking beautifully about Homer is a matter of giving his words the sort of "cosmetic" beauty in which appropriateness is conflated with attractiveness. It is no accident that Ion and Socrates appear not to notice that they interpret "speech appropriate to a leader" in different ways. The criticism of poetry at which the *Ion* hints so delicately is precisely this: poetic speech is measured by the standard of sweetness rather than truth but in a way that ends up confusing our sense of truthfulness.

It is of course compatible with the idea that good poetry is sweet that it be true. Readers sometimes assume that Plato condemns Ion simply for lacking a craft, but his admiring portrayal of Socrates—famous for his professions of ignorance and divine guidance—make this unlikely. So it is worth noting that many readers (notably Plotinus and Shelley) have found in the *Ion* and, especially, the *Phaedrus* an account of poetic inspiration or "madness" akin to the philosopher's encounter with transcendent Forms (*Phaedrus* 245a; 248d–e). Perhaps, then, when Socrates says that poets are divinely inspired, he means that they have a heightened sensitivity to sensible beauty deriving from an intuition of intelligible Forms, an intuition which they transmit through the sensible beauty of their poetry. On this reading, the motif of divine inspiration signals the power of poetry to convey insight, an insight profoundly gratifying precisely because of our limited human capacity to understand. Poetic power would not derive from articulate, technical knowledge of its subject matter, but it would nevertheless be cognitive.

However, Socrates says that only those souls who have gazed longest and most steadily at the Forms are destined to become lovers "of wisdom *and of beauty*" (248d). The poets, by contrast, are sixth in line after these fortunate souls, having seen more only than manual laborers, sophists, and tyrants (248e). Socrates implies, in other words, that their memory of Forms is relatively weak. This is important because when people's memory of the Form of Beauty is weak, they respond to sensible beauties with the most bestial pursuit of pleasure (250–e–51a). Even if the poets of the *Phaedrus* somehow derive their creativity from an intuition of real being, they do not seem ever to grasp the true meaning of sensible beauty. They are, therefore, condemned to an unphilosophical pursuit of pleasure, just like the "honey-gathering" poets of the *Ion*. (See *Symposium* 208e–209d for a different but equally ambiguous description of poetic creativity.)

One striking feature of *philosophical* madness in the *Phaedrus* is that this condition of being "out of one's mind" is a return to the fullness of oneself rather than a departure from it. It is notable, therefore, that in the *Ion* Socrates insists that the voice singing through the mouths of poets does not belong to them (534d). Ion admits that the appearance of anguish he creates when performing the *Iliad* is at odds with the calculating attention necessary for that performance (535e). In this sense, the words he speaks do not "sound like" him. But Socrates says that they do not belong to him in a deeper sense. Why are the *Ion*'s poets alienated from the beautiful words they speak when the *Phaedrus*' philosophers are not? (My emphasis on the poet's alienation contrasts with a more common emphasis on the poet's passivity; see, for example, Woodruff 1982.) One intriguing possibility is that Socrates insists on Ion's alienation from the divine voice that possesses him precisely because his taste for the sweetness of poetry has left him indifferent to the question of its truth (cf. *Grg.* 510d–511a).

Republic 2: poetic beauty and truth

Socrates' first important treatment of poetry in the *Republic* is part of a longer discussion of how to educate children who will grow up to be guardians of the ideal city. It falls roughly into two parts, the first concerning the content of poetry and the second concerning its narrative form. In the discussion of content, Socrates makes explicit what was only implicit in the *Ion*: poetry is beautiful when it represents heroic and divine characters accurately (377c–e).

His point is not that poems must be faithful to real life individuals and events in all their particularity. What he requires is that poems conform to true *patterns* of what gods and heroes are like, at least with respect to "the most important things" (377e). For example, since the afterlife is not terrible for someone who is genuinely courageous, poets should not depict Hades as an object of fear to heroes (386a–c). Socrates seems to be making the point that Aristotle will make in the *Poetics* in distinguishing poetry from history: "The poet's job is not to say what *has* happened but rather what *could* happen, things that are possible either because they are likely or because they are necessary" (*Poetics* 9 1451a36–8). We may object to his characterization of poetic speech as false, rather than fictional (Gill 1993), but since—arguably—fictional worlds must correspond to the real one with respect to *important* things in order to be compelling, Socrates' demand for truthfulness of pattern is not obviously misguided.

Aristotle is interested in the *plausibility* of poetry to an adult audience, not its truthfulness (Halliwell 2002: 164–176). Unlikely events may occur, but a good poem conforms to the audience's antecedent sense of what is typical. Plato, on the other hand, seems to assume that poetry is responsible for shaping our sense of the plausible in the first place. This is why it has a role to play in education (Lear 2006). But the poet's capacity to manipulate beliefs raises a question for Socrates' account. In addition to requiring accuracy, he requires stories to benefit the city in the sense of inculcating beliefs that will suit the future guardians to their civic task. Can the demand for civic benefit conflict with and take priority over the demand for accuracy?

At first glance, the answer appears to be yes. The first story Socrates criticizes on the grounds of falsehood—Hesiod's story of Zeus castrating his father, Cronus—is a story which he immediately admits may after all have happened. It should nevertheless be censored so that the young guardians don't get the wrong impression about how to treat their own fathers (377e–378b). This moment, as well as the Noble Lie that Socrates advocates later, may suggest that truthfulness is not, after all, important. But we should resist an interpretation that sees education in the ideal city as producing socially useful but brainwashed simpletons. This is precisely the view of what makes people just that Socrates must reject (362a).

We can resolve this problem by recalling that poetic speech, like all speech, is not simply a matter of representing the world but also a matter of communicating a vision of the world to an audience occupying a certain perspective. Although this point may seem modern, it is also Platonic. Plato has the Visitor make this point in the *Sophist* when he distinguishes two kinds of *mimēsis*, likeness-making and appearance-making, on the basis of whether the image corresponds to the model's true proportions or to proportions that "seem beautiful … but only because it's seen from a viewpoint that's not beautiful" (*Sophist* 236a–b). The Visitor has in mind colossal statues which distort the proportions of the human body so as to make the statue look "right" to spectators on the ground, that is, in an epistemically disadvantaged position. The Visitor contrasts this ugly point

of view with an "adequate" perspective from which things appear as they truly are. So, to return to the *Republic*, even if there is a perspective from which someone could see the truth in Hesiod's story (Socrates considers the ability to read allegorically at 378d), the poet must consider how his story will appear to his actual audience. Suppose it is true that Zeus castrated Cronus. According to Socrates, gods never cause harm, so Zeus must have been helping his father. This is how a truthful poet must represent it (380a). It is a real question, however, whether a poet could depict Zeus' behavior as benign to an audience that did not already have the moral orientation to see just punishment as a form of care. Children (and I suspect most adults too) cannot help but hear this as a story of a son harming his father. This is a psychological fact about the way such an event must seem to a child (and to most adults) at his stage of psychic development. Thus even if Hesiod represents an historical fact, he communicates something false. This problem of how the audience's character affects mimetic success is one to which Socrates will return in Book 10 (604e).

What I suggest, then, is that requiring poets to say only what promotes good moral character is not really separate from requiring them to say only what is true. That's because in Plato's view, the truthful vantage point on the world is the morally virtuous one. The job of poetry in moral education is to say only what can be truly seen from the vantage point of a child so as to develop in him a character capable of seeing the world truly. Once he occupies this truthful perspective, capable of seeing good and bad for what they are, he is ready to welcome the rational account of the truths he sees (*Resp.* 402a). Socrates is seriously committed, therefore, to truthfulness as a criterion of poetic beauty.

Republic 3: the apparent speaker of beautiful poetry

One of the "patterns" Socrates lays down for poetic content is that gods should never be depicted as liars: "there is no lying poet in the god" (382d). Interestingly, he treats lying not simply as saying something inaccurate about the world but, more importantly, as conveying a false impression—an illusion (*phantasma*)—of the speaker's soul. When we lie, we create "a sort of imitation [*mimēma*] of the false condition in the soul and an image [*eidōlon*] that comes into being later" (382b). In the first instance, Socrates has in mind the way lying makes it appear that the speaker believes what he says. But lies can create a false appearance of a speaker's emotions and character as well. Strikingly, the terms Socrates uses to analyze spoken falsehood—*phantasma, mimēma, eidōlon*—are precisely the ones he uses in Book 10 to analyze poetic *mimēsis*. It is our first indication that the problem of poetic truthfulness concerns not only how poems make the world appear but also whose voice it is we seem to hear.

Socrates introduces the notion of *mimēsis* in book three when he turns from discussion of poetic content to narrative style. The question he considers is whether and in what way the young guardians will be allowed to recite mimetically, that is through direct dialogue by contrast with narration in the poet's own voice (394d). In fact, he never seriously considers banning mimetic narrative altogether. The real issue is *whom* the young guardians will be allowed to portray in direct dialogue. Will they be limited to the "gentlemanly style" that imitates only decent men or may they also use the opposite style that imitates absolutely anything, no matter how base, or a mixture of both? (The fact that Socrates calls the gentlemanly style "unmixed" sometimes leads readers to confuse it with simple narration "unmixed" with any dialogue.)

Unsurprisingly, he concludes that they may use only the gentlemanly style. The guardians, like all citizens of the ideal city, must perform only one job and not dabble in the tasks that belong to others. Since "imitations practiced from youth become part of nature and settle into habits of gesture, voice, and thought" (395d), there is a danger that people who are exposed to and enjoy hypermimetic poetry will come "to enjoy the reality."

Many scholars have assumed that, since Socrates imagines *mimēsis* of decent characters as a step in the process of becoming a decent person oneself, *mimēsis* essentially involves emulating and assimilating oneself to a poetic character, insofar as that is possible. To imitate Achilles, according to this interpretation, is to imagine being him, to inhabit his speech and actions "from the inside" (Ferrari 1990, Halliwell 2002: Ch. 2). One serious problem with this reading, however, is that it is hard to see how *mimēsis* q*ua* imaginative identification could apply to the production of instrumental music, paintings, and embroidery, as Socrates seems to suggest it should (401a–b). Related to this, the self-assimilation reading requires us to find a new conception of *mimēsis* when he returns to the topic in Book 10, since there painting is the paradigm by which poetry is understood.

Let us look more closely at how *mimēsis* is distinguished from simple narration. When a poet tells his story using simple narrative, according to Socrates, "the poet himself is speaking and is not trying to make us think that the speaker is anyone but himself" (393a). Simple narration as Plato understands it occurs when the narrative voice is and seems to be the voice of the poet. Now consider the following passage from the *Iliad* (1.17–20):

> Agamemnon, Menelaus—all Argives geared for war!
> May the gods who hold the halls of Olympus give you
> Priam's city to plunder, then safe passage home.
> Just set my daughter free, my dear one …
>
> (Fagles trans.)

Whose voice do we seem to hear? According to Socrates, the poet in this passage "speaks as if he himself were [the priest] Chryses, and tries as hard as he can to make us think that the speaker is not Homer, but the priest himself, who is an old man" (393a–b). Homer *could* have narrated this scene simply. In a singularly charmless passage, Socrates does just that when he retells it in his own voice (393d–394a). His point is to show how the same content can appear to be spoken by different people, depending on which words the poet chooses.

The central contrast between simple and mimetic narrative, in other words, lies in the truthfulness of the speaker's appearance. The poet or performer who narrates with *mimēsis* shapes his own voice (and bodily posture) so as to create the image of another person (393c). Socrates describes the mimetic narrator as "hidden," suggesting that he is occluded from view. This is just the sense of imitation we found in Book 2, in the discussion of the second "pattern" of poetic content, the pattern according to which gods must never be depicted as making it appear to us that they are other than what they are. *Mimēsis* is an audience-directed activity of appearance-making, not an inward-looking process of identifying oneself with poetic characters. (Socrates' emphasis on what the poet "makes us think" is a reason to speak in terms of appearance-making rather than likeness-making, *contra* Belfiore 1984 and Burnyeat 1997.) It is the sort of thing Ion

does when he makes it seem to his audience that he's weeping when in fact he is laughing inside.

Interestingly, Socrates extends this analysis to poetic meter and musical mode. Different musical modes "imitate" (399a; 399c) the voice typical of different sorts of character trait. The idea seems to be that the numerical proportion describing the relation of high, middle, and low notes of a given scale corresponds to the numerical proportion describing the relation of the "high" (rational), "middle" (spirited), and "low" (appetitive) parts of the soul of a given character-type (Schofield 2010). A person's voice, at least ideally, manifests in sound the proportion that orders the parts of his soul. The poet can capitalize on this fact, composing in a particular mode when he wants to make it appear that a person of that sort is speaking. Likewise, he can compose in meters whose rhythm "imitates" certain characters (401a; 399a–400b). The suggestion that meter is mimetic is particularly important. If meter is the hallmark of poetry, as Socrates seems to assume it is (*Phaedrus* 258d; *Phaedo* 61b), then *all* poetry employs *mimēsis*, even if it is narrated "plainly."

Once we recognize that mimetic narrative is a sort of falsehood in self-representation, we can see that the gentlemanly style, which imitates only decent voices, is truthful in its way. It is the style *of* a gentleman in the sense that the voice we hear is always characteristic of the gentlemanly guardian who is, in fact, speaking (396c–d).

His speech "hides" himself in the sense of making it seem that a particular person other than himself is the one talking, but on the other hand it conveys an accurate image of the speaker's general character. For Plato, character-type determines our identity more than idiosyncracies of personality or history. So while all *mimēsis* strictly involves speaking as someone else, the speaker in the gentlemanly style is nevertheless true to what is most important in himself.

At this point, we begin to suspect that narrative form and content are not independent aspects of the beautiful poetry admitted to the ideal city. For, as we saw before, the truth about the most important things which beautiful stories preserve is also the way the world appears from the beautiful perspective of a good person. The poet of the gentlemanly style says only the kind of thing about the world that a decent person would believe, and speaks only in the voice of a decent person. Indeed, his saying only the kind of thing that seems true to a decent person is one important way the poet creates the appearance of a decent person's voice. If this is correct, then decency of poetic voice is the paramount principle of poetic beauty, as Socrates suggests at 400d–e.

What, then, should we say about the hypermimetic style of Homeric epic and tragedy? Socrates says that it is the style of an "inferior" person (397a), but it is important to see that the inferiority of this sort of poet is manifested in the multiplicity of his imitation itself and not especially in the fact that any particular character he portrays is bad. It may perplex us how Socrates can think of a style that imitates a wide variety of disparate, contradictory voices as the style of a single, bad kind of person. But this is just one of the central claims of the *Republic*: the unjust person only appears to be a unified character, but is in fact full of internal faction (443d–e; developed more extensively in Books 8 and 9). The reason only a decent person is in a position to have a uniform voice is that he is the only person with a unified soul.

Leaving his ethical theory aside, what this suggests is that in Plato's view the hypermimetic style of drama and epic lacks any unified narrative voice. He makes just this point in the *Laws*. The Athenian argues that "since the poet's craft is *mimēsis*, he is often compelled to contradict himself, when he creates men with opposing characters, and he

doesn't know which of the opposing speeches is true" (719c). His view seems to be that the different dramatic characters are distinguished by their different views of the world while the poet himself has no distinct or steady view of the world at all. We are likely to disagree that dramatic narrative is a cacophony of voices and views of the world, but the problem of how it manages to convey a unified vision, much less express a unified perspective of the poet, is real.

Poetic habituation

Socrates claims that repeatedly engaging in one sort of imitation or other engenders "habits of gesture, voice, and thought" (395d). According to a widespread interpretation, the educational effect Socrates describes depends on the child's practicing seeing the world from inside the perspective of whatever character he imitates, but as we have seen, *mimēsis* in Book 3 is an activity of using one's body and voice to make an appearance; it is not a matter of imaginative self-assimilation. How then are we to understand the psychological efficacy of poetic education?

Throughout the *Republic* Socrates associates the "mixed" style with unbridled appetitiveness: "polyharmonic songs and odes that make use of every sort of rhythm" are compared to a diet rich in pastries: their "complexity engender[s] intemperance … whereas simplicity in musical training engenders temperance in the soul" (404d–e, cf. 373a). Socrates conceives of temperance as the propensity to take nonrational pleasure in a way that is harmonious with the judgments of right reason, and as we will soon see, he thinks of the nonrational parts of the soul as especially susceptible to appearances. So perhaps the habit of mind instilled by poetic education is the habit of taking pleasure in creating appearances of one sort or other (Lear 2011). It is the pleasure we take not in genuinely trying to *be* a hero, for example, but in looking like one. If the appearance of heroism created is accurate, as in the gentlemanly style it will be, then the child will have learned to enjoy acting and sounding like who he is and should be. He will thus be in a position to "welcome" reason's judgment of how to live (401d–402a). Conversely, if he has learned to enjoy looking like all sorts of people he is not, he will find it difficult to be the sort of person he should be. Indeed, he will find it difficult genuinely to be a unified person at all. For he, like the democratic man of Book Eight, will have developed a taste for "being" one sort of person on one day and another the next (561c–e).

On this interpretation, we need not think of poetry as teaching us to delight in creating effects on others. We can be the audience of our own appearance-making. Think of the play of young children whose performances seem to be directed to themselves, checking themselves in the mirror as they go. And for a young child, what more is there to being a hero than looking like one? Actually, this is a confusion to which even we adults are susceptible. Recall Ion. Socrates asks whether in the grip of divine enthusiasm he and his audience believe they are in the midst of the stories he tells. Ion responds that his eyes are full of tears, his hair stands on end, and his audience weeps and looks terrified (*Ion* 535c). Has he answered yes to Socrates' question? The conversational implicature suggests that he has. Crying, hair standing on end: these are the look of people facing misfortune. But when pressed on the question of whether he really believes what he appears to believe, Ion says that he does not. The fact is that in the context of performance, the distinction between really being terrified and merely looking terrified is elided (Ferrari 1989).

Socrates bans poetry in the "mixed" style from the ideal city while acknowledging that it is more pleasant, at least to most of us, than the austere "gentlemanly" poetry that remains (397d). (The latter sort of poetry does have its pleasures, otherwise it could not do the work of habituating the nonrational soul.) At this point, we cannot understand why intense aesthetic pleasure is varied, untruthful, and intemperate, and so we cannot fully understand why hypermimetic poetry is, in Plato's view, so dangerous. For this, we need the rich psychological theory of the central books of the *Republic* and the metaphysics on which it depends.

Poetic pleasure

In *Republic* Book 9 Socrates develops a complicated argument to the effect that only rational pleasures are genuine. Gratification of non-rational desire provides merely apparent pleasure. In calling some pleasures "apparent," Socrates does not deny that we *feel* them very intensely. His point is this: pleasure arises when we are filled with "what is appropriate to our nature" (583e, 585d); in this respect it is akin to perception of being benefitted. Just as some visual experiences are merely illusory, however, so too some feelings falsely appear as pleasure. In particular, Socrates argues, we are likely to confuse the relief of pain—a movement that returns us to a calm but imperfect, intermediate condition—with the genuinely pleasant fulfillment of rising above this intermediate condition. Likewise, the calm intermediate condition may feel unpleasantly tedious in the wake of an apparently pleasant process.

Notice that these illusory experiences of pleasure and pain depend on a felt contrast with their (sometimes equally illusory) opposite (584a). One implication is that we can sustain (illusory) pleasure by manufacturing new pains to contrast with it. This is significant for understanding poetic pleasure. Recall that Socrates suggested that poetic sweetness grows in proportion to mimetic variety. He is now in a position to explain that phenomenon: variation, including variation in narrative voice, contributes to a dynamic in which new tensions are excited so as to allow for new (apparent) pleasures. But if this is so, then poetic pleasure, just to the extent that it depends on variation, is merely illusory. In fact, Plato hints rather emphatically at an association between merely apparent pleasures and the pleasures of poetry (though presumably he thinks we experience them in other contexts as well). He calls them "phantasms," "sorcery," "mere images and shadow-paintings (*skiagraphia*) of true pleasures" (583b, 584a, 586b). The references to shadow-painting foreshadow the discussion of *mimēsis* in Book 10, where it is a paradigmatic example (602d; cf. 365c). *Skiagraphia* seems to have been a technique of creating a realistic effect by juxtaposing contrasting colors (Keuls 1978: Ch. 4). It seems unlikely therefore that any poetry gives us genuine pleasure.

Socrates concludes by arguing that only the rational part of the soul is capable of genuine fulfillment and pleasure. Pleasures of appetite and spirit are (or at least typically are) mere appearances generated by relief of pain. For our purposes what matters most is the distinction Socrates draws between two ways of feeling non-rational, apparent pleasures. He grants that these may be in some degree true, but, he argues, that is possible only on condition that the soul as a whole is ruled by reason. In a rationally governed soul, actions aimed at appetitive fulfillment are governed by an understanding of what the body is and what constitutes its health (586d–e). That is to say, these (apparently) pleasant actions are not reactions against pain, but pursuits of our overall well-being, measured by the standard of truth rather than of subjective experience. However,

a person dominated by irrational parts of his soul will embrace the need to exacerbate his desires and their attendant pains as the condition of keeping the "pleasures" pouring in. He thus actively exploits their illusory aspect.

This is crucial for understanding just how far the pleasures of Homer and the tragedians are from being genuine. The poet of the gentlemanly style, with his uniform voice, is willing to risk a whiff of monotony. By contrast, the hypermimetic poet's readiness to speak in any voice whatsoever suggests that he is unconcerned with what is genuinely beneficial and dedicates himself only to the intensity of subjective experience. His style is typical of a character completely undisciplined by reason. The pleasures of the "honeyed Muse" are therefore not just false, but as false as they could be.

Republic 10

Plato draws these threads together in *Republic* Book 10. There, Socrates renews his analysis of *mimēsis* as appearance-making, developed more generally as a theory of what poets and painters do. The point, he says, is to show how the psychological theory he has developed justifies his earlier decision to ban all poetry that is "imitative" (595a). It is now widely agreed that by "imitative poetry," Socrates refers to the hypermimetic "mixed" style, just as he did when he banned it in Book 3 (Belfiore 1984, Burnyeat 1997, Ferrari 1989). He does not intend to eliminate poetry altogether (607a). Still, it is a difficult but rewarding task to see how he avoids this extreme conclusion.

The Greek word for poet, *poiētēs*, literally means "maker." Homer's creativity is so wonderful because, we feel, it brings *everything* that really matters in human life before our eyes and ears. The first step of Socrates' argument is to clarify the distance between this poetic "making" and the sort of making typical of craftsmen. He begins by reminding Glaucon that they agree that for any group of things sharing the same name, there is a Form. For example, there is a Form associated with couches and another Form associated with tables (596a–b). The fact that Socrates speaks here of Forms of artifacts raises significant questions for his metaphysics, but we can leave those aside for now. What matters is what Socrates chooses to emphasize about them: Forms are devoid of multiplicity. There is only one instance of each because this one Form is fully what it is to be a thing of that kind (596a–b, 597b–c).

Socrates floats the suggestion that these unique Forms were made by gods, but he doesn't appear committed to the idea (597b). His primary interest is in describing the limit case of making, of bringing something into full being, so that we can better understand the craftsman's practice. Although carpenters make numerous particular couches of different sizes and styles, there is a sameness to their production that is akin to the putative divine making of Forms. However many and various the couches may be, they all share in being couches. This is no accident but stems from the fact that craftsmen guide their actions by "looking to" one and the same Form on each occasion (596b). Craftsmen are able to make things that share in being because their deliberative focus is on the one true being of the things they make.

From this point of view the sheer multiplicity of poetic making looks not just wonderful, but bizarre. Socrates compares it to a person holding a mirror (596d–e). His point is not about artistic realism but rather about the connection between poetic multiplicity and ontology. If poets could really make everything in the world, they would indeed be astonishing. However they bring forth a variety of things only in appearance, not

in their being. And so their activity of "making" a multiplicity is no true making at all. Glaucon says that what they do should instead be called *mimēsis* (597d–e).

Socrates does not intend to diminish our awe for Homer simply on the grounds that he does not truly make the things his poems represent. No sensible person ever thought he had, although we do tend to assume that good poems and their authors somehow "participate" in truth and communicate this truth to us. Socrates argues, however, that the appearance of a thing is importantly different from its being. A thing's being is stable (deriving as it does from the Forms) but its appearance is liable to change with every shift in perspective (598a). Since *mimēsis* is essentially a practice of creating appearances, it is to these appearances that the poet must "look" in determining his creation. So long as he is faithful to them, he need consider neither the being of the Forms nor even the being of the sensible objects whose appearances he creates. The mimetic maker as such and the poems he creates are "at a third remove from the truth" (597e).

It is sometimes supposed that in *Republic* Book 10 mimetic appearances are inevitably and equally deceptive (Belfiore 1984, Moss 2007). If so, then the analysis of *mimēsis* here is importantly at odds with the one found in Book 3 where, we saw, Socrates assumes that it is in principle possible to create poetic images that are truthful in their "pattern." Notice, however, that the idea of being "removed from the truth" which Socrates invokes here refers to the ontological status of appearances, not to their representational fidelity (Nehamas 1982). It may still be the case that some ways of appearing show what a thing "really" looks like in a way that others don't.

Is there reason to think that Socrates allows for any distinction between truthful and completely false *mimēsis* in Book 10? I believe there is. It is important to keep two points in mind, however. First, since Socrates clearly distinguishes what craft and natural objects *are* from how they *appear* (598a), we should not think of any appearance as conveying the being of those objects. There is for Socrates no more hope of discovering the being of a thing by examining its appearance than we would think there is of discovering the molecular structure of something by examining its color. Second, and related to this, what something "really" looks like depends crucially on the perceiver. It is the way something looks to a perceiver who is properly oriented. Now we may all be equally well positioned to determine whether a given appearance is the appearance of a person. But Greek poetry (and visual art, too) depicts *excellent* people (Moss 2007). So whether or not a poet's *mimēsis* is truthful will depend on the moral quality of the audience for whom he creates his appearances.

The role of the perceiver in shaping appearances is something that Plato has Socrates draw to our attention (Harte 2010). Appearances do not change of their own accord; they change because the spectator's position has changed (598a). In a perplexing passage, Socrates claims that a painter ignorant of carpentry could paint a carpenter and thereby deceive "children and foolish people" (598b–c). There is some debate as to whether these fools mistake the painted carpenter for a real one or whether, as Burnyeat (1997) has argued and as I agree, the apparent realism of the painting makes them think the *painter* is a carpenter when he isn't. In either case, notice that the spectators' mistake depends on their occupying a position of ignorance.

Socrates seems to believe that the practice of *mimēsis* is committed to taking the perspective of the ignorant as authoritative. Whereas craftsmen take their instructions from users who know what their products should be, poets and other imitative makers create "what appears beautiful to the majority of people who know nothing" (602a). In the first instance he means that the poets of his day, who are "as imitative as they

could possibly be" (602b), pander to the masses. It may therefore seem that his criticism applies only to hypermimetic "mixed" poetry but leaves open the possibility of a sort of poetic *mimēsis* governed by the authority of knowledge or true belief. As we will see, however, Socrates thinks that poetry inevitably speaks for and gives voice to the ignorant, childish element in our souls.

Socrates argues as follows. The subject matter of epic and tragedy is human beings suffering misfortune (603c). What does an unfortunate person look like? If he is decent, that is to say, ruled by reason, he judges that, despite the way he feels, his situation is not so bad. He struggles against his grief and shows the undisturbed face of reason's judgment (603e–604c). But this appearance can be grasped as the appearance of someone heroic only by a spectator in a position to know or to have the true belief that this is what real heroes look like. In other words, it takes a decent, temperate spectator to recognize the realism in a genuinely heroic appearance. Now a poet *could* imitate this way, but it would not be easy. The mass audiences of epic and tragedy are ignorant and the experience of fighting against their grief is alien to them (604e). So a poet who imitates with an eye to how things appear to the masses will instead choose to make his hero appear "excited" and "multicolored," giving in to his grief and, indeed, prolonging it.

There is another reason it is hard for a poet to imitate a decent man. Recall that the appearances engendered by poets do not convey the being of the objects whose appearances they are. The rational part of our soul has nothing to learn from them and so can gain no pleasure from them. Poetic pleasure is necessarily nonrational. *Anyone's* decision to watch and listen to any sort of poetry is, therefore, a decision to gratify the nonrational parts of the soul (606b). Will the faithful, calm appearance of a grieving hero please the nonrational soul? The entire point of the poetic education described in Books 2 and 3 was to develop souls for whom the answer would be yes. But Socrates admits that unless we are exceedingly virtuous, it probably will not please us (605c–d). We may be sufficiently decent to recognize this appearance as correct, but it does not satisfy the "hunger" most of us have for "weeping and wailing" (606a). Socrates does not explain this hunger for tears in any detail. (See *Philebus* 47e–50b for a discussion of the mixed pleasures of tragedy and, at greater length, of comedy.) But we need only acknowledge that it feels good to cry and that we cannot get this pleasure unless we feel the pain of grief or pity. (Note that this is an extreme case of merely apparent pleasure; both the pleasure and the pain on which it depends are, in Socrates' view, false.) The upshot is that even a poet composing for a decent audience will find easier success creating the appearance of an excitable, undisciplined character. Poetry essentially addresses the non-rational part of the soul. And this means it gives voice to the perspective of the child in us, a perspective whose truthfulness must be won and constantly maintained by the external rule of reason. The hypermimetic "mixed" style is not just *a* style of *mimēsis*. It is the style to which all poetry tends, when left to its own devices. This accounts for the perpetual vigilance poets require, even in the ideal city. The limitation of the gentlemanly style is one that must be imposed on poets from the outside. It is not a limit that can be discovered simply by attending to the essence of mimetic practice.

Socrates concludes by turning to the question of how exposure to tragic *mimēsis* affects us relatively good people. We do not officially approve of throwing tantrums or killing people we dislike, but our less-than-obedient souls sympathize and enjoy the attending pleasures when we see poetic characters do these things. What harm is there, we think, in spending an hour watching *other* people behave like this? We will not immediately start mimicking them (Nehamas 1988). The harm is precisely the one he outlined in

Book 3: repeatedly enjoying pleasures that reason does not approve will make it ever more difficult to enjoy doing in real life what reason judges we must do. The harm is intemperance.

We may hope to avoid Socrates' draconian censorship by pointing to our greater respect for the appropriateness of grief and other passions (Nussbaum 1990:17, 387–88), but this move will achieve less than we might expect. Pleasure, in Plato's view, is akin to a perception that things are going well. So long as we enjoy poetic depictions of bad people behaving badly, we in effect allow ourselves to approve it in a voice that is other than, indeed contradicted by, the voice of reason. This nonrational pleasure is the expression of an element of our souls. But Socrates insists that the voice of reason expresses our true human identity (588c–589b). Its norms are the ones in light of which we should constitute ourselves. Tragic poetry is therefore false in how it represents the world and false in giving voice to something other than the rational selves we most truly are. Of course, most of us are all too ready to lead lives that merely appear to be human so long as we can enjoy the intoxications of the beast within. Homer must be alienated from the city so that we are not alienated from ourselves.

Plato's Socrates evidently loves the poetry he warns us against. He is himself an inveterate story-teller, creating fabulous myths and recounting the drama of his encounters with all sorts of interlocutor. It is hard to believe he accepts his own argument. Indeed, he invites us to refute it (607d). We might begin, as Aristotle did, by rejecting the idea that *mimēsis* produces multiplicity in a way that craft-making does not. Poetic speech has a unity that suggests an origin in a poet who understands something, and recognizing this unity is itself a source of pleasure. We must take care, however, not to make poetic pleasure too cerebral, the sort of pleasure that only a literary critic could enjoy. Socrates' challenge concerns pleasures that stem from our absorption in poetic action. Socrates himself suggests a solution in the *Phaedrus* when he says that he reads myths not to find truths about the rest of the world, but in order to know himself (230a). Perhaps we need to let our nonrational desires out to play in order to understand what complex creatures we are. Socrates would be quick to remind us, though, that we should not lose ourselves in play. Our true self wears the face of reason and we must struggle to be true to it.

References and further reading

Belfiore, E. (1984) "A Theory of Imitation in Plato's *Republic*," *Transactions of the American Philological Association* 114: 121–146.

Burnyeat, M. (1997) "Culture and Society in Plato's *Republic*," *Tanner Lectures on Human Values* 20: 215–324.

Cooper, J. (ed.) (1997) *Plato: Complete Works*, Indianapolis, IN: Hackett.

Ferrari, G. (1990) "Plato and Poetry," in G. Kennedy (ed.), *The Cambridge History of Literary Criticism 1: Classical Criticism*, Cambridge: Cambridge University Press: 92–148.

Gill, C. (1993) "Plato on Falsehood—Not Fiction," in C. Gill and T. P. Wiseman (eds.), *Lies and Fiction in the Ancient World*, Exeter: University of Exeter Press.

Halliwell, S. (2002) *The Aesthetics of Mimēsis: Ancient Texts and Modern Problems*, Princeton, NJ: Princeton University Press.

Harte, V. (2010) "*Republic* X and the Role of the Audience in Art," *Oxford Studies in Ancient Philosophy* 38: 69–96.

Janaway, C. (1992) "Craft and Fineness in Plato's *Ion*," *Oxford Studies in Ancient Philosophy* 10: 1–23.

Keuls, E. (1978) *Plato and Greek Painting*, Leiden: Brill.

Lear, G. (2006) "Plato on Learning to Love Beauty," in G. Santas (ed.), *Blackwell's Companion to Plato's Republic*, Malden, MA: Blackwell: 104–124.

——. (2011) "Mimēsis and Psychological Change in *Republic* III," in P. Destrée and F.-G. Herrmann (eds.) *Plato and the Poets*, Leiden: Brill: 195–216.
Liebert, R. (2012) *Hunger for Tears: Archaic Poetics and Plato's Critique of Poetic Pleasure*, University of Chicago, IL, dissertation.
Moss, J. (2007) "What Is Imitative Poetry and Why Is It Bad?" in G. Ferrari (ed.), *The Cambridge Companion to the Republic*, Cambridge: Cambridge University Press: 415–44.
Nagy, G. (2002) *Plato's Rhapsody and Homer's Music: The Poetics of the Panathenaic Festival in Classical Athens*, Washington, WA: Center for Hellenic Studies.
——. (1982) "Plato on Imitation and Poetry in *Republic* X," in J. Moravcsik and P. Temko (eds.) *Plato on Beauty, Wisdom, and the Arts*, Totowa, NJ: Rowman & Allanheld: 47–78.
Nehamas, A. (1988) "Plato and the Mass Media," *Monist* 71: 214–234.
Nussbaum, M. (1990) *Love's Knowledge: Essays on Philosophy and Literature*, Oxford: Oxford University Press.
Schofield, M. (2010) "Music All Pow'rful," in M. McPherran (ed.), *Plato's Republic: A Critical Guide*, Cambridge: Cambridge University Press: 229–248.
Scott, D. (2010) "Plato, Poetry and Creativity," in P. Destrée and F.-G. Herrmann (eds.), *Plato and the Poets*, Leiden: Brill: 131–154.
Stern-Gillet, S. (2004) "On (Mis)Interpreting Plato's *Ion*," *Phronesis* 49: 169–201.
Woodruff, P. (1982) "What Could Go Wrong with Inspiration? Why Plato's Poets Fail," in J. Moravcsik and P. Temko (eds.) *Plato on Beauty, Wisdom, and the Arts*, Totowa, NJ: Rowman & Allanheld: 137–150.

Related chapters

12. Plato: moral psychology
13. Plato on virtue and the good life
15. Plato's metaphysics
26. Aristotle's aesthetics

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Part III

ARISTOTLE

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18
READING ARISTOTLE

Michael Pakaluk

It is a challenging task to distinguish what a philosopher like Aristotle *says* in a text from the implications and deeper insights that may somehow be contained in what is said. To figure out the former, I wish to reserve the word "reading," and for the figuring out the latter, "interpreting." Obviously for reading a philosopher in the narrow sense it is helpful to grasp his view in outline; to understand his aims; to appreciate which philosophers he is influenced by and replying to; to be familiar with his main technical terms; and finally to understand the cultural, political, and literary context of that philosopher's writings. These are the sorts of assistance in reading a philosopher that one would typically find in a thorough introduction (see Barnes 2001 and Pakaluk 2005: Chapter 1). Nonetheless, assistance may also be given in simply grasping how Aristotle typically conveys thoughts and arguments in writing, which is the task of this essay.

Students reading Aristotle in translation should appreciate how much "reading" of Aristotle has already been accomplished for them, through the judgment of experts. Manuscripts of Aristotle's works typically date from medieval times and consist of strings of letters without spacing or punctuation, to save space and hence expense. The resolution of these strings into words, sentences, and phrases is almost always a matter of technique merely, not art, and when there are plausible alternatives, the differences are rarely important. The resolution of sentences into paragraphs, however, does involve art and frequently makes a difference—indeed, as we shall see below, there is reason to think that if any segments of text beyond the sentence are to be recognized at all in an Aristotelian text, then they should probably be recognized at a finer grain than editors typically like to recognize as mere paragraphs (but see Netz 2001, for a somewhat different view). The point is that when a student opens a translation of Aristotle and sees paragraphs, or *fails* to see paragraphs, then she is seeing the results of judgments made by the editor about how to "read" that text.

Expert judgment also enters into the establishment of the text. Aristotle himself wrote or dictated just one form of words in composing a work, but as scribes over the centuries made copies of copies, variations were introduced through human error, or areas of particular copies were destroyed by moisture, worms or other agents. Consequently the extant manuscripts will differ from one another at various points, and so an editor needs to decide which variation best represents the words that Aristotle originally wrote or dictated, the art and science of which is called "textual criticism." Occasionally there are cases where both good judgment is needed in deciding upon the correct reading, and something important hinges on the decision. The reader of a work of Aristotle in translation, who has no access to the Greek or to the "critical apparatus" at the foot of a good Greek edition, which sets out clearly the manuscript variations, will not be able

to "see" the effects of these judgments, unless the translator flags the issues in footnotes and gives alternative translations corresponding to alternative ways of resolving those issues. Even then one is relying upon the translator's determination of which issues are important enough to flag.

Finally, of course, the translator must use expert judgment to decide such things as which English word best captures the sense of a Greek word; when to render word-for-word and when to use contextual translation or even paraphrase; and how best to express perceived emphasis and tone.

It would be possible to give assistance in "reading Aristotle" by discussing how to evaluate decisions in each of these three matters, for students who have some knowledge of Greek, but what sort of advice is relevant to someone reading Aristotle in translation? I shall consider, first, discerning the structure of the text, and, second, construing the character of arguments.

To discern structure, it is helpful to believe that there is a structure to be discerned. A reader today will not be encouraged in that belief, for various reasons. A trivial reason was already mentioned: if a translation gives breaks only occasionally at purported paragraphs, then it is natural to presume that those paragraphs have no deliberate structure, or that this structure is less important than the paragraphs. A less trivial reason is the influence of a certain way of reading Aristotle which was bound up with a rediscovery of Aristotle in the analytic tradition in the '50s and '60s, and which was probably necessary for that rediscovery.

The issue may be engaged by considering the question: should we read Aristotle as an early scientist? If we suppose yes, and that his works should be viewed as early contributions to scientific disciplines (logic, physics, biology, psychology) which have since developed markedly, then we would indeed expect his works to be affirming doctrines and to be systematic; yet at the same time they would also be largely irrelevant, as superseded since by better science. On the other hand, suppose that we should read him as pursuing philosophy not unlike Wittgenstein, or an "ordinary language" philosopher such as J. L. Austin, or that some parts or aspects of his work admit of being read in this way. That is, suppose we approach Aristotle as someone less concerned with building up science systematically than with probing foundations and presuppositions, through subtle attention to our use of language and "what we would say": then Aristotle might look highly interesting and relevant to our concerns; and yet we would then not expect to find, and not be interested in finding, any systematic affirmation of doctrine. The point here is not that the only sort of system one might find in a philosopher's writing is the constructive articulation of doctrine, but rather that someone who approaches a philosopher not looking to find that kind of system is more likely to overlook other kinds.

This "dialectical" approach to Aristotle has additionally been encouraged by what seems an exaggerated emphasis on the importance of *aporia* and *lysis* in Aristotle. An *aporia* is a difficulty or perplexity, literally a "blockage," which arises when each of two opposing views looks to be plausible: for example, "people become friends with those similar to them" and "people become friends with those different from them." These views are in opposition, yet each is plausible. The *lysis* or resolution of an *aporia* is typically achieved by qualifying both claims, so that they obviously no longer conflict. Aristotle's resolution in this case is: "people become friends *on the basis of virtue* with those similar to them *in virtue*" but "people become friends *on the basis of utility* with those different from them, sc. *with complementary utility*" (*Eth. Nic.* 8.1–4). The resolution is

valuable because it is nuanced: to reach the resolution, we need to make the appropriate distinctions, presumably by grasping the underlying reality well enough. The resolution "saves appearance" by revealing the nuanced view that is at the basis of the relatively un-nuanced but plausible views which gave rise to the difficulty. Those plausible views are shown to be true, on condition that what is meant by those putting forward those views is the more nuanced view.

Certainly, Aristotle often states a difficulty and then resolves it in the manner just explained. Thus *sometimes* he proceeds in the manner of *aporia* and *lysis*, but does he think that philosophy *always* proceeds in this way? If he does, then although each stated difficulty would lead to a resolution, each resolution would lead to further difficulties, and then someone might wish to characterize his thought *taken as a whole* as dialectical rather than doctrinal. (Again, it would not follow that his philosophy was not systematic for all that: in Aquinas' *Summa Theologiae* there is no resolution not preceded by a difficulty, but the work is systematic throughout. Rather, the view that the interest of Aristotle's philosophy does not consist in any system it is advancing would appear stronger.)

Two passages seem to suggest that *aporia* and *lysis* constitute a universal method for philosophizing, first, the opening of *Metaphysics* B:

> For those who wish to get clear of difficulties it is advantageous to discuss the difficulties well; for the subsequent free play of thought implies the solution of the previous difficulties, and it is not possible to untie a knot which one does not know … those who inquire without first stating the difficulties are like those who do not know where they have to go; besides, one will not even know, otherwise, whether one has actually found what one is looking for or not; for the end is not clear to such a person, while to someone who has first discussed the difficulties, it is clear.
>
> (B.1, 995a27–b2)

If it is not possible to recognize a solution without one's having first savored the difficulty, then it would seem that philosophical investigation must always proceed by stating and resolving difficulties.

A second such passage is *Nicomachean Ethics* 7.1:

> We must, as in all other cases, set the observed facts before us and, after first discussing the difficulties, go on to prove, if possible, the truth of all the common opinions about these affections of the soul, or, failing this, of the greater number and the most authoritative; for if we both refute the objections and leave the common opinions undisturbed, we shall have proved the case sufficiently.
>
> (7.1, 1145b2–7)

Here too *aporia* and *lysis* seem to be recommended for all discussions.

Neither passage needs to be understood as proposing a universal method, however. The first can be interpreted, given the context, as affirming the close relationship between metaphysics in particular and dialectic (as indeed some medieval commentators understood the passage): given that metaphysics for Aristotle purports to deal with incorporeal and non-sensible realities, it would not unreasonably require some special method. The second passage, in the commonly-used translation by W. D. Ross, over-

translates the relevant phrase, since Aristotle does not write "in all other cases" but simply "in other cases." So again the passage can be interpreted as describing a method which is not universal but which should be applied in cases suitably similar to that considered. If these passages can be interpreted as not stating a universal method, they should not be so interpreted, because, plainly, Aristotle only occasionally follows that method; moreover, it seems ridiculous to insist that no one could adopt a view in, say, biology, without having first canvassed all the difficulties (whatever that could mean).

A final and not insignificant influence is simply the requirements of publishing in journals, the main vehicle today for scholarly discussion of Aristotle. Since journal articles presuppose an analogy with research in experimental science, they are best and most easily written if they address a "problem." Such articles in the case of Aristotle are either text-centered, in which case they look at a single text in isolation, or thematic, in which case they pick out texts related to a similar theme across different works or contexts. Neither approach has a home for, say, a careful and sustained discussion of a text as located in a broader context, or for discerning and discussing the organization of a relatively lengthy text, as would be commonplace within the older commentary tradition. A journal article is meant to be a "contribution to knowledge," and a commentary does not look like a contribution to knowledge. Even when a scholar today writes a commentary, as in the famous Clarendon Aristotle series, these commentaries tend to be concerned mainly with discussing perceived problems in the text.

The best way to illustrate the kind of system that should be looked for in an Aristotelian text is to give an example. *Nicomachean Ethics* 5.7, on account of its brevity, will serve well. Below is the chapter as it appears in the Ross translation, with paragraph indentations removed. The passage at first looks all a jumble, but does it contain a hidden structure? Let us try to divide it first into its main parts, and then each of those parts in turn into its constituent parts, continuing in this way, until we reach what looks like text that cannot itself be suitably divided, perhaps sentences or arguments.

There seem to be three main segments of the chapter, marked by double slash marks:

> Of political justice part is natural, part legal, natural, that which everywhere has the same force and does not exist by people's thinking this or that; legal, that which is originally indifferent, but when it has been laid down is not indifferent, for example, that a prisoner's ransom shall be a mina, or that a goat and not two sheep shall be sacrificed, and again all the laws that are passed for particular cases, for example, that sacrifice shall be made in honour of Brasidas, and the provisions of decrees. // Now some think that all justice is of this sort, because that which is by nature is unchangeable and has everywhere the same force (as fire burns both here and in Persia), while they see change in the things recognized as just. This, however, is not true in this unqualified way, but is true in a sense; or rather, with the gods it is perhaps not true at all, while with us there is something that is just even by nature, yet all of it is changeable; but still some is by nature, some not by nature. // It is evident which sort of thing, among things capable of being otherwise, is by nature, and which is not but is legal and conventional, assuming that both are equally changeable. And in all other things the same distinction will apply; by nature the right hand is stronger, yet it is possible that all men should come to be ambidextrous. The things which are just by virtue of convention and expediency are like measures; for wine and

> corn measures are not everywhere equal, but larger in wholesale and smaller in retail markets. Similarly, the things which are just not by nature but by human enactment are not everywhere the same, since constitutions also are not the same, though there is but one which is everywhere by nature the best. Of things just and lawful each is related as the universal to its particulars; for the things that are done are many, but of them each is one, since it is universal.
>
> (5.7, 1134b18–1135a8)

Once these main segments are identified—call them I, II, and III —we should attempt to identify their function, to confirm our judgment that we have identified true segments, and to set the direction for moving forward. Thus: it seems the function of Segment I to draw a distinction; of Segment II, to reply to an objection; and of Segment III, to explain perceived variations in natural justice.

Analyze then these main segments one by one, discerning their parts. For example, the first seems to admit of being parsed as follows:

> Of political justice part is natural, part legal // natural, that which everywhere has the same force and does not exist by people's thinking this or that; // legal, that which is originally indifferent, but when it has been laid down is not indifferent, // for example, that a prisoner's ransom shall be a mina, or that a goat and not two sheep shall be sacrificed, // and again all the laws that are passed for particular cases, // for example, that sacrifice shall be made in honour of Brasidas, and the provisions of decrees.

Once these divisions are introduced, it becomes clear that Segment I can be represented in the form of an outline:

> *Aristotle draws a distinction*
>
> Of political justice part is natural, part legal:
>
> 1. natural, that which everywhere has the same force and does not exist by people's thinking this or that;
> 2. legal,
>   a. that which is originally indifferent, but when it has been laid down is not indifferent, e.g.
>   i. that a prisoner's ransom shall be a mina, or
>   ii. that a goat and not two sheep shall be sacrificed,
>   b. and again all the laws that are passed for particular cases, e.g.
>   i. that sacrifice shall be made in honour of Brasidas, and
>   ii. the provisions of decrees.

The text above is exactly the original text; I have merely introduced formatting to clarify the structure of the text which in the translation looked to be an undifferentiated flow.

Now that the structure is discerned, formerly obscure matters become clear. For example, clearly Aristotle himself endorses the definition which is proposed for natural

justice, namely, "that which everywhere has the same force and does not exist by people's thinking this or that." Moreover, since the "and" in that definition apparently serves to introduce a kind of reformulation of what precedes it (a function which scholars refer to as "epexegetical"), the crucial part of the definition is actually its first part, namely, "that which everywhere has the same force." Yet when we recognize that the first part of the definition is both crucial and endorsed by Aristotle, we see that here he seems to think of natural justice in the way that he thinks of anything which has a nature, namely, as somehow involving powers which admit of being expressed or impeded in different circumstances (see *Physics* 2.1). The curiousness of this conception may well have escaped notice, if our attention were not drawn to it through our analysis.

Given that Aristotle provides two examples for each characterization of "legal" (or "conventional," *nomikon*) justice, we might suppose he takes the characterizations to be in fact of different *types*; also, we may wonder whether there is a reason why he gives two separate examples in each case. The first type ("that which is originally indifferent") would presumably be like cases of a road which initially is indifferent as to direction, but which by convention is made one-way in one direction rather than another. Aristotle's two examples seem chosen as cases in which plausibly there is no fact of the matter as to what counts as a satisfactory amount, although for different reasons in the different cases: in the first case, the things exchanged are incommensurable, as a penny would be as equal in value to a person's life as a million dollars; and in the second case, (Aristotle seems to be presupposing) nothing we do for the gods even approaches repaying them (see *Eth. Nic.* 8.14).

As regards the second type ("laws that are passed for particular cases"), in contrast, there is no suggestion that there is an original indifference in how particular cases are settled; rather it seems to involve cases in which there can be reasonable disagreement about how best to settle something, but where some person or group has authority to settle it nonetheless: suppose, in such a case, that it is settled in a way that we regard as less than ideal; nevertheless, to follow the decree of the relevant authority counts as just, precisely because by convention it had authority to settle cases like that. The correct explanation, then, for why it is just to follow that decree must appeal to that convention, not to the nature of the case. (Socrates' acquiescence in the justice of the decision of the Athenian jury would be like that: he believed that the jury's decision was wrong in substance, but it was just for him to follow it, because they had authority to decide cases such as his.) As regards this second type of legal or conventional justice, however, it is unclear so far why two examples are given and how exactly they illustrate that type. Here the analysis draws attention to a puzzle which perhaps can be resolved later.

Turning now to Segment II, we see that it may be parsed thus:

> Now some think that all justice is of this sort, because that which is by nature is unchangeable and has everywhere the same force (as fire burns both here and in Persia), while they see change in the things recognized as just. // This, however, is not true in this unqualified way, but is true in a sense; // or rather, with the gods it is perhaps not true at all, while with us there is something that is just even by nature, yet all of it is changeable; // but still some is by nature, some not by nature.

It seems that this segment does not have a hierarchical structure but can be well enough represented as a list of points. Yet even listing the points yields a gain in clarity, as alert-

ing us to ambiguities in the text, which we might choose to resolve other than as in the Ross translation:

Aristotle replies to an objection

1. Now some think that all justice is of this sort, because that which is by nature is unchangeable and has everywhere the same force (as fire burns both here and in Persia), while they see change in the things recognized as just.
2. This [viz. that what is by nature is unchangeable], however, is not true in this unqualified way, but is true in a sense;
3. or rather, with the gods [what is by nature] is perhaps not ~~true~~ at all [changeable], while with us there is something that is just even by nature, yet all of it is changeable;
4. but still some [justice] is by nature, some not by nature.

Let us say that 1 states the objection; 2 denies a presupposition of the objection, which concerns how "by nature" is to be understood; 3 draws a distinction which helps to explain why that presupposition, although false, has a certain plausibility; and 4 then insists that Aristotle's claim about natural justice has been untouched by the objection. In the analysis, the square brackets represent words added to resolve an ambiguity, and the crossed-out word represents a word not in the Greek but supplied by Ross in his translation.

The analysis makes certain obscure things clear. For example, we can now see that in 1, which tells us what "some think" rather than what Aristotle maintains, a clause has been added to what Aristotle had endorsed in the preceding segment as a definition of natural justice, namely, the idea that what is just by nature "is unchangeable." The objection raised in this segment seems to hinge on this addition, because what is urged against the view that natural justice exists, is precisely that there is "change in the things recognized as just." Aristotle seems even to hide this addition, to give the objection an initial plausibility.

Since the objection depends upon an addition's being introduced under the cover of an idea which Aristotle endorses, we might expect that Aristotle's reply would involve keeping those two ideas distinct. And indeed that seems the correct reading of point 2, which apparently should be understood, not as indistinctly referring to what "some think," or even as referring to that element of what "some think," which Aristotle agrees with, but rather to that additional and (in Aristotle's eyes) dubious element. In fact, 2 seems to be concerned not with natural justice (as suggested by Ross' "this") but with how "by nature" is best defined. As the analysis has made this clear, I have clarified the referent of 2 by supplying in square brackets words which specify that referent. What Aristotle says in reply to the objection is that the only sense in which it is generally true that "what is by nature is unchangeable" is simply that what is by nature "everywhere has the same force"; however, that which is by nature is not unchangeable "without qualification," because the degree and way in which a nature is manifested, or gets impeded in its action, typically changes according to the circumstances.

Once 2 is understood in the manner explained, then 3 may be glossed accordingly, so that that claim too is seen to be concerned with the notion of "by nature" rather than with justice. In that case the reference in 3 to the gods introduces the standard

Aristotelian doctrine, that gods are, or serve to animate, the celestial bodies, and that the nature of these gods is such that they cause the celestial spheres to move without change or interruption, eternally. Thus, only with respect to the gods is it correct to say that their having a definite nature implies not only that they always have the same power, but also that they have an unchanging operation.

If 3 is discussing what "by nature" amounts to rather than what natural justice amounts to, then the Ross translation is misleading, because it resolves certain ambiguities incorrectly, and so in the analysis we might add words as necessary in square brackets, to indicate the correct way in which the ambiguities should be resolved. Furthermore, "true," which Ross supplies, is shown to be misleading. (A Greekless reader could perhaps discover the addition by an astute comparison of alternative translations.)

Next divide Segment III thus:

> It is evident which sort of thing, among things capable of being otherwise, is by nature, and which is not but is legal and conventional, assuming that both are equally changeable.// And in all other things the same distinction will apply; by nature the right hand is stronger, yet it is possible that all men should come to be ambidextrous. //The things which are just by virtue of convention and expediency are like measures; for wine and corn measures are not everywhere equal, but larger in wholesale and smaller in retail markets.// Similarly, the things which are just not by nature but by human enactment are not everywhere the same, since constitutions also are not the same, though there is but one which is everywhere by nature the best. //Of things just and lawful each is related as the universal to its particulars; for the things that are done are many, but of them each is one, since it is universal.

It seems to consist, first, of an observation about natural justice, followed by an example; followed by two observations about legal or conventional justice. The last part seems to belong better with what is discussed in the following chapter (5.8). So by attending too to some finer-grained distinctions, we might propose this structure:

Aristotle explains perceived variations in natural justice

1. [justice by nature] It is evident which sort of thing, among things capable of being otherwise, is by nature, and which is not but is legal and conventional, assuming that both are equally changeable

   and in all other things the same distinction will apply;
   by nature the right hand is stronger, yet it is possible that all men should come to be ambidextrous.

2. [justice by convention, first type] The things which are just by virtue of convention and expediency are like measures

   for wine and corn measures are not everywhere equal, but larger in wholesale and smaller in retail markets.

3. [justice convention, second type] Similarly, the things which are just not by nature but by human enactment are not everywhere the same,

since constitutions also are not the same, though there is but one which is everywhere by nature the best.

4. Of things just and lawful each is related as the universal to its particulars; for the things that are done are many, but of them each is one, since it is universal.

Obviously, the proposed analysis is a hypothesis about the structure of the text: before accepting it conclusively, we should evaluate it in comparison with reasonable alternatives. Obviously, too, to adopt such a hypothesis is to take a stance about the character of Aristotle's position and argument, which is the very reason why discerning the text's structure is important.

If we adopt the above analysis provisionally, what should we say about it? The analysis supposes that the structure of Segment III mirrors that of Segment I, and that, after Aristotle has raised and, as he thinks, put to rest the objection considered in Segment II, he returns to the types of justice he had distinguished in Segment I, in order to explain in each case what it amounts to, on the supposition that what is by nature in human affairs is something that everywhere has the same force and yet is not unchangeable. (Note the repetition in the phrases "not everywhere equal" and "not everywhere the same.") In particular, he is interested in the interplay among nature, incidental circumstances, and human convention. That the parts of this segment mirror those of Segment I is flagged by the supplementary headings which have been placed in square brackets. (The square brackets indicate that these added words are editorial merely.) Let us consider the three parts in turn.

The first part begins in the Ross translation with "It is evident." Now a fine point which would not be discernible by a Greekless reader, except perhaps through a comparison of translations, is that this phrase actually occurs at the end of the sentence: "Which sort of thing, among things capable of being otherwise, …. is evident." The placement of that phrase at the end of the sentence, in Greek and in English, gives it a strong emphasis. (Accordingly, one might rather render it as "is obvious.") That the immediately following sentence begins with "and," indicates that the first statement is meant to stand on its own, emphatically. All of this is to say that Aristotle's personality and approach are reflected here. He seems not to have much patience with the view that all justice is by convention. It was clear from Segment II that the only "argument" he wished to consider in favor was a mere confusion, based on a faulty understanding of "by nature." Here he indicates that, in his view, once that confusion is clarified, then picking out the natural from the conventional in matters of justice is not a difficult matter. We may not agree with him, of course, but still, that seems his conviction.

The analysis also makes clear Aristotle's point in his reference to right-handedness: he is maintaining that even in the case of a "power" which is obviously by nature, such as the dominance of the right hand, that power's operation may be impeded. Right-handedness is "by nature" in the sense that it "everywhere has the same force," that is, someone trained to be ambidextrous would in some sense always remain disposed to favor the right, yet it would be possible to impede the power by an intensive intervention. It seems to be Aristotle's suggestion that the impeding of a natural "power" could hardly always succeed, and that the effort to do so would be difficult and require a kind of "violence." (Aristotle criticizes Plato's communism in *Politics* II on exactly these grounds, that it involves "impeding" the natural attachment we feel for what is our own.) Note that if the analysis above is correct, it steers us clear of faulty inter-

pretations which would have Aristotle drawing some comparison between right- and left-handedness.

As regards Part 2, if we are correct in taking it to correspond to the first type of conventional justice, then Aristotle's example is meant to exhibit the separate contributions of nature and convention when convention fixes something originally indifferent, and we interpret the example accordingly as observing that, in all times and places, wholesale measures are larger than retail measures, by the nature of the case (this is the contribution of 'nature'); however, which units are used for each (for instance, kilograms and grams, versus pounds and ounces) is a matter of convention, as it is originally purely indifferent but fixed by convention. (The difference between wholesale and retails would be "by nature," for Aristotle, since the market, he holds, is "by nature" for human beings—see *Pol.* books 1 and 2—and the difference between wholesale and retail is basically that between selling to and buying at the market.)

Finally, Part 3 seems to refer to Aristotle's notion in the *Politics* that political theory has two aspects: determining the best constitution absolutely, and determining the best constitution which is in practice attainable. Aristotle looks to be making an *a fortiori* argument: if something so decisive and fundamental as the best instantiation of the ideal constitution varies in different circumstances, then it is hardly surprising that "human enactment" might generally realize the same ideal of justice differently in different circumstance.

Thus, if we revisit *Eth. Nic.* 5.7 as a whole, after having "read" it in the manner suggested, by providing an analysis, what have we learned? There are both philosophical lessons, and lessons about reading Aristotle. The philosophical lesson is that, contrary to what someone might have thought when first encountering the phrase "natural justice" in the text, Aristotle is not concerned, at first glance at least, with anything like what we would call "natural right" or "natural law." Rather, he seems concerned with something like: to what extent does our assessment of the "rightness," in the sense of appropriateness or aptness, of practical judgments, depend on our making reference to realities of human life and of the human condition, as opposed to making reference to some matter of human agreement or discretion? In this precise sense it would be against "natural justice"—that is, it would be inept, practically unsustainable, and foolhardy—to attempt to require that everyone be ambidextrous or to abolish private property, to insist that the same measures be used both for wholesale and for retail, or, in the face of difficulties in the execution of a relevant ideal, to reject that ideal. In sum, Aristotle's concern is with a certain kind of foolhardiness in practical judgment rather than with the violation of "rights" or the "moral law."

This philosophical lesson is important for our purposes here as implying a lesson about reading Aristotle. The contrast between what we might have taken the chapter to be concerned about and what, given our analysis, it seems to be actually concerned about, shows the value of that analysis. Apparently it would be possible for someone to read Aristotle, perhaps even diligently and widely, and yet repeatedly miss his point. To understand him, it seems necessary that our thought correspond in contour to his; but if he structures his writing with the detail and complexity which seems to have been revealed in our analysis, then it would seem necessary that we learn to see that structure in reading him.

When the structure of the text is revealed then typically one needs to come to grips with the character of the arguments in Aristotle it contains. So let us turn now to the task of dealing with the compression of Aristotle's writing and with the variety of inferential relationships he contemplates.

Consider first the opening sentence of the *Nicomachean Ethics*, which in the Ross translation is as follows (with some small changes):

> Every art (*technē*) and every <type of> inquiry (*methodos*), and similarly every action (*praxis*) and choice (*prohairesis*), is thought to aim at some good; and for this reason (*dio*) the good has rightly been declared to be that at which all things aim.
>
> (1094a1–3)

Ross' translation is useful, but I have improved it in three small ways, by adding "type of" in angle brackets; by rendering *prohairesis* in the usual way as "choice" (instead of "pursuit," which Ross has); and by rendering *dio* as "that is why" (instead of "for this reason" in Ross' translation, which although equivalent is potentially misleading in the context).

Now observe the following about this sentence:

1. Aristotle writes the universal quantifier, "every," separately for "art" and for "inquiry", but only once for both "action" and "pursuit" (Ross' translation accurately reflects that distinction of the Greek). That he does so has the effect of grouping together the second pair more tightly than the first pair.
2. The first pair consists of ways of seeking *types* of things: an art, such as shoemaking, makes a type of thing, shoes; a method of inquiry, such as geometrical construction, seeks truths in a certain branch of knowledge; but the second pair, for all we know, pertains in contrast to particulars, such as some particular choice or action. Indeed, if we put this second observation together with the first, we might wonder if, in grouping together choice and action, Aristotle means to refer to choice-action pairs found in particular actions.
3. The first pair deals with pursuits of things separate from the actions that pursue them: a shoe stands distinct from the actions of the shoemaker who makes it, and the cognition or knowledge of truths discovered by the following of a method stands distinct from the investigation which led to these truths. On the other hand the second pair, for all we know, applies also to actions which are done for their own sake, apart from any product which may be produced by them. Within the first pair, an art produces an "external good," according to Aristotle, whereas a method of inquiry produces an "internal good" of the soul (see *Eth. Nic.* 1.8).
4. The phrase, "for this reason" in the second clause qualifies not the claim contained in that clause ("the good is that at which all things aim") but rather the rightness or correctness of someone's declaration (Plato's?) that the good is that at which all things aim. That is, what Aristotle notes in the first clause ("Every art …") confirms the correctness of someone's assertion, mentioned in the second clause ("and for this reason …").

Once we put these four observations together, it looks as though in the first clause Aristotle is deliberately considering different classes of cases (pursuit of a good in general vs. in particular; production vs. action; external vs. internal product; initiation vs. execution of an action), in order to make an induction, which in turn serves to confirm something which some unnamed authorities have stated. If so, then what the sentence is doing is quite different from what is supposed on a common interpretation, namely,

that Aristotle is deductively drawing a conclusion in his own person, and thereby committing a "quantifier shift" fallacy (since he has wrongly presumed that from "each thing aims at some good or other" it follows that "there is some one thing at which all things aim"). So by reading the sentence thus attentively, we would at least hesitate to read Aristotle in a common way, which takes him to have tripped over a fallacy.

The example we have just chosen is one in which by careful attention to word choice and phrasing, we are better able to make a good guess as to how to construe an argument. In other cases, it helps to see that Aristotle is presenting several arguments quickly, in a compressed manner, and that each argument is developed on a different "ground." Here too we can take an illustrative example from the beginning of the *Nicomachean Ethics*. Recall that Aristotle argues in Chapters 1–2 in the following way. He assumes that every expertise (*epistēmē*, *dunamis*, *technē*) aims at some good. He claims that, when one expertise is under another expertise, then the good aimed at by the latter is better than the good aimed at by the former. It follows that if there is an expertise which all other types of expertise are under, then the good aimed at by that expertise will be the highest good (sc. attainable through human efforts). He argues in this way, recall, to establish that there is a highest good and to identify it in a preliminary way, namely, as whatever it is which is aimed at by that highest expertise. In this line of argument, the crucial step that needs to be proved is that there is indeed an expertise which all other types of expertise are under. Here is the passage (again, in the Ross translation, with some slight changes) where Aristotle argues for this, which I have parsed to exhibit the four considerations which it contains:

> And skill in government (*hē politikē*) appears to be of this nature:
>
> (i) for it is this that ordains which of the sciences should be studied in a state, and which each class of citizens should learn, and up to what point they should learn them;
> (ii) and we see even the most highly esteemed of capacities fall under this, e.g. generalship, household administration, rhetoric;
> (iii) now, since skill in government makes use of the rest of the sciences; and
> (iv) since, again, it legislates as to what we are to do and what we are to abstain from,
>
> the end of this science must include those of the others, so that this end must be the good for man.

Considerations (i) and (ii) seem to form a pair and to constitute arguments *against* the claim that some expertise is higher than skill in government, with (i) arguing with reference to theoretical disciplines, and (ii) with reference to practical disciplines. Presumably in making a claim about all theoretical disciplines Aristotle in (i) intends also to include wisdom (*sophia*)—a theme that he returns to later in 6.13. As for generalship, household administration, and rhetoric, if Plato's dialogues reflect popular sentiment, then these were standardly taken to be candidates for the most powerful and influential practical skills and therefore, in that sense, the highest. (iii) and (iv) then argue positively that skill in government is the highest from the way it makes use of all other types of expertise and its simply being the highest authority over human action. Again, the point here is not to state or discuss Aristotle's views but simply to show how rapidly he can state a variety of considerations based on a variety of grounds. Aristotle frequently

writes in such a manner, giving arguments that have much greater complexity and subtlety than in this simple example.

The final feature of Aristotle's writing to consider may be called "the variety of inferential relationships" which Aristotle introduces to support a claim. Here it is important to stress the contrast between the richness of supporting considerations which Aristotle employs, and the relatively narrow repertoire of types of argument held up as canonical for students of philosophy today. A common presumption is that any philosophical argument can in principle be presented in the form of a list, where premises are distinguished clearly from inferred statements, and the latter are meant to follow deductively from the former: such an argument is scrutinized for soundness and validity, and the soundness of the premises is a matter of whether they themselves can be deduced or are somehow supported by empirical evidence. On this picture, when a statement is not a premise, then it can depend on another statement only in the sense that it follows deductively from that statement (perhaps together with other statements). That is, philosophical *argument* is simply deduction, and perhaps even deduction within first order logic. So, if on this picture anyone who wishes to argue philosophically by saying something like "Y, since X," he must be construed as claiming that Y follows deductively from X.

Three things need to be stressed about how Aristotle argues in contrast. First, he is as disposed to take what follows from something to support it, as what it follows from. (We tend to say that the former "supports" it and that the latter "confirms" it.) Picture what is claimed (say, that S is P) as situated in the world and therefore, if it really is so, as connected with other things in the world by various relationships, which are either prior or posterior:

→ S is P →

As S's being P cannot exist in the world apart from these relationships, then any observation about them tends to substantiate that S is P. Aristotle indicates what confirms a claim, as following from it, with the inferential terms *hothen* ("whence") and *dio* ("which is why," "which is the reason," which we have already seen in the first sentence of *Nicomachean Ethic*).

Second, Aristotle typically thinks of philosophical claims about the world in relationship to the human beings who make those claims, in particular, to the sort of effects those claims, if true, would have on how things appear to us, what we would say or would be disposed to say, and how we would act or typically act. Aristotle's taking this approach is, in part, in the tradition of Socrates in the *Phaedo* (99e), who in giving his intellectual autobiography says that when he rejected the theories of the natural philosophers who preceded him, he changed from attempting to view the world directly to viewing it through statements (*logoi*), and, in part, derived from his own conviction that human beings are truth-seeking animals, and so their own sensitivities and affections are a significant clue as to how the world actually is. A multitude of examples could be given, but consider the following from *Eth. Nic.* 1.12:

> Everything that is praised seems to be praised because it is of a certain kind and is related somehow to something else; for we praise the just or brave man and in general both the good man and virtue itself because of the actions and functions involved, and we praise the strong man, the good runner, and so on,

> because he is of a certain kind and is related in a certain way to something good and important.
>
> (1101b12–18)

Here Aristotle wishes to mark out something in the world, things that are "of a certain kind and … related in a certain way to something good and important," and to argue that the ultimate human good is not in this class, but he does so by reference to our practices of praising. Clearly he is not interested in those practices on their own; he is not engaging in sociology. Also, it seems right to say that he is not interested in those practices simply as signs or evidence of something else. It seems better to say that he thinks of human beings, and how things appear to them and how they speak and act, as part of the system he wishes to describe.

Third, besides logical and causal relationships, Aristotle in argument draws attention to relationships of fittingness, expectedness, antecedent likelihood, congruity, and whether something makes sense or not (and therefore is "absurd," *atopon*). Examples abound of Aristotle's counting the apparent absurdity of a view as a *prima facie* reason for rejecting it, or otherwise appealing to incongruity. Just from *Eth. Nic.* 1, consider:

> Must no one at all, then, be called happy while he lives; must we, as Solon says, see the end? Even if we are to lay down this doctrine, is it also the case that a man is happy when he is dead? Or is not this quite absurd, especially for us who say that happiness is an activity?
>
> (1.10, 1100a10–14)

> [Continuing the passage above, about objects of praise.] This is clear also from the praises of the gods; for it seems absurd that the gods should be referred to our standard, but this is done because praise involves a reference, to something else.
>
> (1.12, 1101b18–21)

In the last passage, Aristotle actually uses incongruity to support a view: the proof that praise *necessarily* involves a reference to something else is that we praise the gods by referring them to our own standard; to do so is admittedly incongruous; we therefore would avoid it if possible; thus the fact that we continue to do so nonetheless shows that that is not possible.

The worked examples given above show, I hope, that reliable interpretations of Aristotle must start from a very high degree of care in reading him. Aristotelian texts must be savored to be well appreciated. Perhaps a final reason, then, why we typically do not read an Aristotelian text so as to discover its complexity and nuance, is that we simply do not take the time.

References and further reading

Barnes, Jonathan (2001) *Aristotle: A Very Short Introduction*. Oxford: Oxford University Press.

Netz, Reviel (2001) "The Aristotelian Paragraph," *Proceedings of the Cambridge Philological Society* 47: 211–232.

Pakaluk, Michael (2005) *Aristotle's Nicomachean Ethics: An Introduction*. Cambridge: Cambridge University Press.

Aristotle's collected works are available in:

Barnes, J. (ed.) (1984) *The Complete Works of Aristotle: the Revised Oxford Translation*, Vols. 1 and 2. Princeton, NJ: Princeton University Press.

This same work is also available in a searchable format online, by subscription: *The Complete Works of Aristotle: Electronic Edition* (InteLex) Past Masters, at www.nlx.com/collections/8.

Selections of Aristotle's works in English translation are provided in
Fine, G. and Irwin, T. (1995) *Aristotle: Selections*, Indianapolis, IN: Hackett.

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19
ARISTOTLE: LOGIC

Ermelinda Valentina Di Lascio

Aristotle's reputation as the discoverer and founder of "logic" is widespread. Indeed, in the conclusion to one of his logical works he claimed such a status for himself (*Soph. el.* 34, 183b15–184b8). Philosophers before Aristotle showed interest in the subject of correct reasoning, but Aristotle was the first to conceive of a *systematic* treatment of it, which remained influential until the modern age (cf. Kant, *Critique of Pure Reason* Smith (1929) B viii).

Aristotle did not employ the word "logic", but claimed for himself the discovery of the subject of deduction. "Deduction" or "syllogism" translates the Greek *sullogismos*. Plato had already employed *sullogismos* with the meaning of "reasoning" and *sullogizesthai*, the verb from which *sullogismos* is derived, with the meaning "to infer". Aristotle attributes to *sullogismos* a more technical meaning: broadly speaking, "a kind of argument which from propositional premises necessarily infers a less general propositional conclusion".

Aristotle presents a treatment both of syllogism in general and of several *kinds of* syllogism: the demonstrative one (used in science), the dialectical one and the sophistical one (used in certain kinds of exchange between two interlocutors). The general theory of syllogism is discussed in the *Prior Analytics* (in two books), the demonstrative syllogistic in the *Posterior Analytics* (in two books), the dialectical one in the *Topics* (in eight books), and the sophistical one in the *Sophistical Refutations*. In antiquity these treatises were grouped together under the title *Organon* ("Instrument"; the title refers to the later dispute about whether logic was a part of or a tool for philosophy); neither the grouping nor the title (nor in fact the titles of the single treatises) seem to be Aristotle's, although significant cross-references occur. The *Organon* contains two further treatises: *Categories* and *De Interpretatione*. According to the standard tradition, these works are preliminary to the *Analytics*: the *Categories* deals with subject and predicate terms and their meanings, while the *De Interpretatione* discusses propositions and their truth-values (thus providing groundwork for the *Analytics* which, according to this view of the *Organon*, deals with arrangement of propositions into arguments). According to a more recent interpretation, *Categories* and *De Interpretatione* are instead propaedeutic to the *Topics*: they discuss issues relevant to *dialectical* argumentation; the *De Interpretatione* in particular concerns "contradictory pairs, which are central to the workings of dialectic" (Whitaker 1996: 1).

Syllogistic

Aristotle explains that he must deal with the syllogism in general before dealing with the demonstrative kind because "syllogism is more universal: a demonstration is a kind

of syllogism, but not every syllogism is a demonstration" (*An. pr.* 1.4, 25b29–31). The same is true for the other *kinds of* syllogism: treatment of syllogism in general is preliminary to all of them.

The syllogism

An argument is a series of propositions, some of which (the premises) are supposed to provide support for another (the conclusion). Aristotle distinguishes two main species of argument: syllogism and "induction" (*epagōgē*) (for example, *Top.*1.12). While an inductive argument argues "from particulars to universals", for example, from the fact that Socrates, Plato and Kallias are mortal it concludes that all human beings are mortal (for issues concerning induction cf. Smith 1995), a syllogism, broadly speaking, concludes something more specific from something more general, for example, it concludes from the fact that all human beings are animals and all animals are mortal that all human beings are mortal. An inductive argument is more persuasive because it is more plausible and clear to most people, a syllogistic one more cogent because the conclusion follows from the premises *by necessity* (in inductions the conclusion follows only *probably*).

Aristotle defines syllogism in the *Prior Analytics*:

> **T1** A syllogism (*sullogismos*) is an argument in which, (S1) certain things having been assumed, (S2) something different from the things which have been assumed (S3) results of necessity (S4–S5) in virtue of their being so. (By "in virtue of their being so" I mean "following because of them", and by "following because of them" I mean "needing no further term from outside for the necessity of the consequence to come about".)
>
> (1.1, 24b18–22)

Two other definitions occur in the *Organon*:

> **T2** A syllogism is an argument in which, certain things having been assumed, something different from the things which have been assumed results of necessity through them.
>
> (*Top.* 1.1, 100a25–27)

> **T3** A syllogism is made of certain things assumed in such a way that it is necessary to say something different from the things which have been assumed through what has been assumed.
>
> (*Soph. el.* 1, 164b27–165a2)

T1's and **T2**'s definitions differ only in their final words and the explanation of "in virtue of their being so" in **T1** might make them equivalent ("in virtue of their being so" is glossed as "*because* of them" which has a very similar, if not the same, import as "*through* what has been assumed": cf. (S4)–(S5) below). Although **T3** differs in some ways, its definition too is substantially equivalent to **T1**'s and **T2**'s.

What kind of argument is a syllogism, as defined in **T1**–**T3** (cf. Alex. *in An. pr.* 16.19–23.13; Ross 1949: 291; Smith 1997: 43–44)?

S1) The plural "certain things assumed" suggests that more than one premise is required;
S2) "something different" indicates that the conclusion must not be identical to any premise;
S3) "results of necessity" indicates that the conclusion is a necessary consequence of the premises. This means that the argument is deductive (and not inductive). Crucially, it also informs us that an argument in which the conclusion does not follow from the premises is not a syllogism: adopting a modern concept, syllogisms are *valid* arguments, that is, arguments in which on the assumption that the premises are true the conclusion *must* be true too;
S4) "in virtue of their being so" indicates, according to **T1**, that the premises must be *sufficient* to deduce the conclusion (arguments in which one premise is suppressed are excluded).

Alexander of Aphrodisias hints at a further implication of the phrase "in virtue of their being so":

S5) "in virtue of their being so" indicates that *all* the premises assumed must be *necessary* to deduce the conclusion: arguments with superfluous or irrelevant premises are not syllogisms.

If we stick to Aristotle's explanation of "in virtue of their being so" in **T1** (cf. S4), Alexander's proposal appears ungrounded. Alexander might however have in mind the section of the *Sophistical Refutations* where Aristotle discusses the fallacy of "false cause" (5, 167b21–36; 6, 168b22–25). This fallacy occurs when in a syllogism leading to an absurd conclusion the sophist asks his interlocutor to grant among the premises from which the absurd conclusion is supposed to follow something irrelevant, that is, something not actually *used* in the deduction of it, and then charges *that* assumption as responsible for the absurd conclusion, thus making his interlocutor look as if he had accepted a faulty premise. Aristotle charges this fallacy with violating the last clause of the definition of syllogism, that is, that the conclusion follows from the premises "in virtue of their being so": this suggests that we must understand the clause as expressing a stricter requirement for syllogismhood than the one pointed out in **T1**. *Topics* 8.1, 161b28–30 confirms this conjecture:

T4 Again an argument can be criticized if the conclusion comes about having eliminated certain premises: for *sometimes people assume more premises than those necessary*, so that it is not in virtue of their being so that the syllogism comes about.

Alexander's suggestion is then correct for the conception of syllogism in the *Sophistical Refutations* and in the *Topics*, and possibly for that in the *Prior Analytics* (cf. Striker 2009: 81–82).

I translated the Greek *sullogismos* as "syllogism". Scholars are divided on this, however: Corcoran (1974), Smith (1995: 30; 2012) and Shields (2007: 119) prefer "deduction"; Keyt (2009: 36), Striker (2009) and Cavini (Castagnoli and Cavini 2012: 123–124) take the opposite view. "Deduction" belongs to modern logic terminology: is an Aristotelian *sullogismos* a deduction?

Keyt and Cavini answer "no". They argue that even if the general account of deduction matches or includes Aristotle's core concept of syllogism, the Aristotelian syllogism is not equivalent to modern deduction because of requirements (S1), (S2), (S5): arguments with only one premise, with the conclusion identical to one premise, with irrelevant premises are not syllogisms, while they count as valid deductions in modern logic. Syllogisms seem to be specific kinds of deductive arguments, but the two are not equivalent.

Smith (2012) prefers the translation "deduction". As we will see, in *An. pr.* 1.4–6 Aristotle individuates specific forms of valid arguments as *syllogismoi* and, in modern usage, "syllogism" refers to those. Therefore, Smith argues, if we adopted the translation "syllogism", we would have to take the definition of *sullogismos* (**T1**) as defining specifically that form of argument, while there is no apparent reason to read Aristotle's definition as restricted to such a subset of valid arguments (cf. Kneale and Kneale 1962: 67; Smith 1997: 42). Moreover—Smith goes on—since modern usage also "distinguishes between valid syllogisms and invalid syllogisms (the conclusion of which does not follow from their premises)", the translation "syllogism" would turn out to be confusing since Aristotle defines *sullogismos* as an argument in which the conclusion results of necessity, that is, as a valid argument.

Even if Aristotle's definition of *sullogismos* covers more kinds of valid argument than those discussed in *An. pr.*1.4–6, though, we can still use *sullogismos* to refer both to the syllogism in general and to those specific forms of syllogism: they are syllogisms in so far as they fulfill the definition of *sullogimos* (Castagnoli and Cavini 2012). Moreover, when we adopt the translation "syllogism" we must employ the term not in the modern sense to which Smith refers, but in accordance with Aristotle's own usage. Provided we do this, and since modern deductions can take forms which Aristotelian syllogisms cannot, the adoption of the translation "syllogism" appears the best option. Such a choice does not prevent us from using modern concepts such as that of validity to elucidate Aristotle's ideas where appropriate.

While I spoke of Aristotle's syllogism as a valid *argument*, this has not always been the standard interpretation. Łukasiewicz (1951) suggested that the syllogism was rather a true conditional *proposition* in which the antecedent is the conjunction of the two premises and the consequent the conclusion: "If A is predicated of all B and B is predicated of all C, then A is predicated of all C" (cf. Patzig 1968). There are important reasons to reject this interpretation. Aristotle never claims that a syllogism is true or false, but rather that a pair of premises yields or does not yield a syllogism (cf. Mignucci 1961: 49), which implies that from a pair of *premises* a *conclusion* either *follows* or does not follow. More importantly, Łukasiewicz's interpretation does not allow for a faithful reconstruction of the syllogistic proofs carried out in *An. pr.*1.4–6.

Categorical propositions

In *An. pr.* 1.1, before defining the syllogism (**T1**) Aristotle defines the propositions which constitute its premises and conclusion:

> **T5** A proposition (*protasis*) is a sentence which affirms or denies something about something; this is either universal or particular or indeterminate.
> (1.1, 24a16–17; cf. 24a28–30)

The syllogistic premises and conclusion are categorical propositions: propositions in which a predicate is affirmed or denied of a subject; they are assertions (*An. pr.*1.2–3) and can be true or false. Subjects and predicates are "terms" (*oroi*): a "term" is "that into which the proposition can be analyzed" (24b16–18). Examples from the *Prior Analytics* suggest that subject and predicate terms are universal, for example, "animal", "man", "horse" (singular terms like "Socrates" are not mentioned, perhaps because they cannot occur as predicates [Striker 2009: 76]; they are instead considered alongside universal subjects in the *De Interpretatione*: cf. 7, 17b1–3, 26–29).

Categorical propositions can be either *affirmative* or *negative* (this feature is traditionally referred to as "quality" of the proposition), and either *universal* or *particular* or *indeterminate* ("quantity" of the proposition). A proposition is universal when the predicate belongs to, that is, is predicated of, all or none of the subject; it is particular when the predicate belongs to some or does not belong to some of the subject; it is indeterminate when the predicate belongs or does not belong to the subject without indication of whether it belongs universally or particularly (24a18–22).

(a) Universal Affirmative Proposition—"Every pleasure is good": "A belongs to all B";
(b) Universal Negative Proposition—"No pleasure is good": "A belongs to no B";
(c) Particular Affirmative Proposition—"Some pleasure is good": "A belongs to some B";
(d) Particular Negative Proposition—"Some pleasure is not good": "A does not belong to some B";
(e) Indeterminate Affirmative Proposition—"Pleasure is good": "A belongs to B";
(f) Indeterminate Negative Proposition—"Pleasure is not good": "A does not belong to B".

Aristotle employs letters ("A", "B") in place of concrete terms, probably imitating the practice of geometers and mathematicians of his time, thus anticipating to some degree the formalization of arguments in modern logic. Aristotle quotes propositions by mentioning the predicate first and the subject after; he uses different expressions: "A belongs to B", "A is predicated of B", "A is said of B" (hereafter I use always the first one). "Quantifiers"—"all", "no", "some", "some ... not"—are applied to the subject in order to indicate both quality and quantity of the proposition.

Indeterminate propositions, (e)–(f), are mentioned rarely in the syllogistic: possibly Aristotle regards them as equivalent to particular propositions (cf. Striker 2009: 77).

Propositions (a)–(d) are traditionally referred to respectively by the shortenings *a*, *e*, *i*, *o*, that is, the vowels in the Latin verbs a*dfirmo* ("to affirm") and n*ego* ("to deny"). (I will therefore indicate syllogistic propositions by the shortenings A*a*B, A*e*B, A*i*B, A*o*B.) Their logical relations are discussed in *De Interpretatione* 7. The propositions in the pairs "*a* and *o*" and "*e* and *i*", having the same subject and predicate, are "contradictory opposites": they cannot both be true or both be false simultaneously, but one of them is true and the other false. The propositions in the pair "*a* and *e*", having the same subject and predicate, are "contrary opposites": they cannot both be true simultaneously, but can both be false; their contradictories, however, that is, the propositions in the pair "*i* and *o*", can both be true, but cannot both be false (traditionally these are called "subcontraries").

In *An. pr.* 1.2 Aristotle investigates a different feature of propositions (a)–(d), namely their convertibility in terms, that is, whether they are equivalent to (in C1 and C3) or

imply (in C2) another proposition in which the same terms appear in reverse order. He establishes the so-called "rules by conversion", useful for his syllogistic:

C1) No pleasure is good ⊢ No good is pleasure (A*e*B ⊢ B*e*A)
C2) Every pleasure is good ⊢ Some good is pleasure (A*a*B ⊢ B*i*A)
C3) Some pleasure is good ⊢ Some good is pleasure (A*i*B ⊢ B*i*A).

(C1 and C2 are both traditionally called *conversio simplex*, C3 *conversio per accidens*; " ⊢" indicates logical consequence.)

The particular negative proposition (A*o*B) is not convertible. This is shown by means of a counter-example with actual terms ("for it is not the case that if man does not belong to some animal, also animal does not belong to some man" (25a12–13)). The validity of (C1)–(C3) is shown through the so-called "proof through impossibility" (cf. p. 280).

Syllogistic figures and moods

In *An. pr.*1.4–6 Aristotle proceeds to find out which pairs of categorical premises, composed in total of three terms because one of them is common to both premises, necessarily imply a categorical conclusion containing the two terms which the premises do not share: these arguments are syllogisms.

In his own words, Aristotle investigates "through what things", "when" and "how" every such kind of syllogism comes about (*An. pr.* 1.4, 25b26–27). "Through what things" refers to the quality and quantity of the premise-pairs, "how" refers to the arrangement of terms in the premises, "when" refers to when, given a certain premise-pair and a certain arrangement of terms, there is and there is not syllogism.

Aristotle distinguishes three arrangements of terms in the premises, that is, three "figures" (*schēmata*): if the term subject of one premise is the same as the term predicate of the other premise (AB–BC), then we get the "first figure"; if the premises share the same predicate term (BA–BC), we get the "second figure"; if they share the same subject term (AB–CB), we get the "third figure". Aristotle calls the term shared by the premises (B) "middle" or "common" and the other two terms (A, C) "extremes" (in general, the "major extreme" is the extreme in the first premise and the "minor extreme" is the one in the second premise); the middle term does not appear in the conclusion, which is composed of the extremes. Taking into consideration the four kinds of categorical propositions—*a*, *e*, *i*, *o*—Aristotle checks which combination of categorical premises in each figure implies by necessity a categorical conclusion which contains the two terms that the premises do not share. Working systematically through the sixteen possible combinations of premises in each of the three figures he shows either that a pair of premises yields a syllogism or that it does not.

Medieval logicians called the quality and quantity of premises and conclusion of a syllogism (for example *aaa*) "mood". Figure and mood combined together capture the *logical form* of a syllogism, that is, what remains of the argument once it is stripped of its content expressed through concrete terms: for example A*a*B, B*a*C ⊢ A*a*C. Aristotle aims to identify the premise-pairs *of a certain form* that yield a syllogism, that is, how many argument-forms qualify as syllogisms. This guarantees that all concrete arguments with the same form will be syllogisms: syllogisms are *always* concrete (letters are only a

device to identify them). In modern terms, Aristotle sets up a "logical formal system": a tool for analyzing and identifying valid arguments (syllogisms) and rejecting invalid ones, on the basis of their logical form. (On the issue of the degree to which Aristotle's logic can be translated into modern logic see Łukasiewicz 1951 and Corcoran 1974.)

Syllogisms in the first figure (*An. pr.* 1.4) come about when both premises are universal, either both affirmative or one negative and the other affirmative, or when one is universal, whether affirmative or negative, and the other is affirmative particular (actually Aristotle does not speak of "premises" but of "relations between terms"). Thus the following argument-forms are syllogisms (Medieval logicians referred to them by mnemonics in which the vowels indicate the quality and quantity of the propositions):

Barbara: A*a*B, B*a*C ⊢ A*a*C
Celarent: A*e*B, B*a*C ⊢ A*e*C
Darii: A*a*B, B*i*C ⊢ A*i*C
Ferio: A*e*B, B*i*C ⊢ A*o*C

Aristotle rules out twelve pairs of premises as not yielding a syllogism: no conclusion *necessarily* follows from them. He does this by employing a method similar to the one used in modern logic to show that an argument-form is invalid which consists in providing at least one counter-example to it, that is, one concrete instantiation with true premises and false conclusion. Of sixteen possible premise-pairs, only four produce a syllogism in the first figure.

Aristotle emphasizes that the first figure syllogisms are "*perfect*" (for example 26b29–31). "Perfect syllogism" is first defined in *An. pr.* 1.1:

> **T6** I call perfect (*teleion*) a syllogism which requires in addition nothing other than the things assumed to make the necessity of the consequence evident; imperfect (*atelē*) the one which requires in addition one or more things which, although they necessarily follow from the terms assumed, are not assumed among the premises.
>
> (1.1, 24b22–26)

In a perfect syllogism (1) it is *evident* that the conclusion necessarily follows from the premises and, therefore, (2) no further assumption beyond the original premises is needed to *show* that. What, however, guarantees the *evidence* of the necessary logical consequence? Aristotle seems to rely on his definitions of "to be predicated of all" and "of none" (24b28–30): he refers to them when he identifies *Barbara* and *Celarent* (25b37–26a2). He defines "to be predicated of all" as occurring "when it is not possible to assume something of the subject of which the other term is not said". If, however, "the validity of the perfect moods can be recognized simply by reminding oneself of the truth conditions of the premises, it is doubtful whether one could still find a difference in degree of obviousness between, say, Celarent and Cesare or Camestres in this way" (Striker 2009: 83). More plausibly, first figure syllogisms are perfect because the transitivity of the relation between the terms is highlighted once the premises are laid down: in AB–BC–AC the order of the terms makes evident that the relation which holds between A and B and B and C must necessarily hold also between A and C (Patzig 1968).

The syllogisms in the second figure (*An. pr.* 1.5) come about when either both premises are universal, one affirmative and one negative, or one is universal and one particular, where again one of them is affirmative and the other negative. Four argument-forms are syllogisms (Aristotle uses different letters for each figure):

Cesare: M*e*N, M*a*X ⊢ N*e*X
Camestres: M*a*N, M*e*X ⊢ N*e*X
Festino: M*e*N, M*i*X ⊢ N*o*X
Baroco: M*a*N, M*o*X ⊢ N*o*X

Twelve premise-pairs are ruled out as not yielding a syllogism.

The syllogisms in the second figure are not perfect:

> **T7** In no way will there be a perfect syllogism in this figure, but there will be a perfectible one.
>
> (27a1–2)

> **T8** It is clear also that all the syllogisms in this figure are imperfect (for they are all brought to perfection by assuming in addition certain things, which are either necessarily implicit in the terms or assumed as hypotheses, for example when we give proof through impossibility).
>
> (28a4–7)

The second figure syllogisms are not perfect (**T7**–**T8**) because it is not *evident* that the conclusion necessarily follows from the premises (**T6**), and they are perfectible (**T7**) because it is possible to *show* that the conclusion necessarily follows, so that the consequential relation *becomes evident*. This is shown by means of proofs in which further assumptions besides the premises are made: they are either implied by the premises or assumed as hypotheses (**T6**–**T8**). Through such assumptions the proofs re-conduct or reduce, using the conversion rules, the imperfect syllogisms to the perfect ones. It must be clear that Aristotle does *not* transform one (imperfect) syllogism into another (perfect) one nor does he make the imperfect syllogisms valid or complete: they are already valid and complete (Striker 2009: 82); he only shows the validity of the imperfect syllogisms through the perfect ones because in the latter the necessity of the consequence is evident and this makes the consequence in the former evident too. For example, the proof for *Cesare* proceeds as follows:

(1) M*e*N	Premise
(2) M*a*X	Premise
(3) N*e*M	Conversion (C1) of (1)
(4) M*a*X	Repetition of (2)
(5) Therefore N*e*X	From (3), (4) by *Celarent*

The proofs for *Camestres* and *Festino* are conducted similarly: *Camestres* is reduced to *Celarent*, *Festino* to *Ferio*. As for *Baroco*, Aristotle employs "the proof through impossibility" (or "indirect proof"—as opposed to the proof by conversion which is called "direct proof"). A hypothesis, that is, the denial of the desired conclusion (its contradictory), is added to the premises; then the contradictory of one of the premises is

derived: since it is assumed that the premises are true, the hypothesis must be false and therefore the desired conclusion true:

(1)	M*a*N	Premise
(2)	M*o*X	Premise
(3)	N*a*X	Hypothesis
(4)	Therefore M*a*X	From (1), (3) by *Barbara*
(5)	But M*o*X	Repetition of (2)–Contradiction between (4) and 5(= 2)
(6)	Therefore N*o*X	From (5) (Contradictory of (3))

In the Medieval mnemonics, the consonants indicate the logical maneuvers to apply: "B"/"C"/"D"/"F" = first figure mood to which the syllogism must be reduced; "c" = proof through impossibility; "s" = *conversio simplex*; "p" = *conversio per accidens*; "m" = interchange premises (so that the major premise comes first). The logical maneuvers must be applied to the proposition indicated by the vowel immediately preceding the letters (when, however, "s" or "p" occurs at the end of the name the *conversio* must be applied to the conclusion of the first-figure mood).

As for the third figure (*An. pr.* 1.6), Aristotle establishes that six argument-forms, two with universal premises, either both affirmative or one affirmative and the other negative, two with one universal and one particular premise, both affirmative, and two with one universal and one particular premise, one negative and one affirmative, are syllogisms:

Darapti:	P*a*S, R*a*S ⊢ P*i*R
Felapton:	P*e*S, R*a*S ⊢ P*o*R
Disamis:	P*i*S, R*a*S ⊢ P*i*R
Datisi:	P*a*S, R*i*S ⊢ P*i*R
Bocardo:	P*o*S, R*a*S ⊢ P*o*R
Ferison:	P*e*S, R*i*S ⊢ P*o*R

Ten premise-pairs do not yield a syllogism. In total, in three figures, out of forty-eight possible premise-pairs, fourteen generate a syllogism and thirty-six do not.

The third figure syllogisms are not perfect, only perfectible. The proofs for their validity are carried out in the same way as those for the second figure syllogisms: *Darapti*, *Disamis* and *Datisi* are reduced to *Darii*; *Felapton* and *Ferison* are reduced to *Ferio*; *Bocardo* is proved through impossibility. *Darapti* and *Bocardo* are also proved, however, and *Disamis* and *Datisi* said to be provable through a method not mentioned previously, the so-called "proof by 'exposition' (*ekthesis*)". Let us see the case of *Darapti*:

(1)	P*a*S	Premise
(2)	R*a*S	Premise
(3)	Let us take one of the Ss, e.g. N	Exposition
(4)	P belongs to N	From (1), (3)
(5)	R belongs to N	From (2), (3)
(6)	Therefore P*i*R	From (4), (5)

The interpretation of the proof has raised some controversy. Alexander of Aphrodisias

(31.1–34.9; 99.16–100.27) suggests that the proof is based on perception and therefore not logical. The term which is "taken out", N, is a sensible individual of the set S: if "animal (P) belongs to all man (S)" and "rational (R) belongs to all man", then we can pick out a man, for example Socrates, and check that he is both an animal (P) and rational (R), so that we can state that animal (P) belongs to some rational being (R).

Łukasiewicz and Patzig reject Alexander's interpretation. They suggest that here too Aristotle reasons "logically and abstractly" by implicitly employing logical laws concerning particular propositions:

(*i*) If P belongs to some R, then there exists a N such that P and R belong to all N–and vice versa;
(*o*) If P does not belong to some R, then there exists a N such that P belongs to no N and R belongs to all N–and vice versa.

The proof would then work as follows (remember that Łukasiewicz and Patzig take syllogisms to be true conditional propositions):

Darapti: "If P*a*S and R*a*S, then P*i*R".

"If P*a*S and R*a*S, there exists a term N such that P*a*N and R*a*N, and if there exists a term N such that P*a*N and R*a*N, then P*i*R. And if all of this holds, then if P*a*S and R*a*S, then P*i*R".

The consequent of the original conditional syllogism, P*i*R, is substituted, on the basis of (*i*), with "there exists a term N such that P*a*N and R*a*N", which, because of the converse version of (*i*), implies P*i*R. If the premises imply something which implies P*i*R, however, then they themselves imply P*i*R (because of the modern propositional logic "law of hypothetical syllogism": Aristotle would employ it without realizing it).

Łukasiewicz and Patzig disagree with Alexander because they interpret the exposed term as general (cf. P*a*N) rather than as individual. Not only does this make the proof rely on something, the converse version of (*i*), which is nothing but *Darapti* itself, but also Aristotle never says that P and R belong to *all* N, but simply that they belong to N. It cannot be the case that Aristotle carelessly omits the universal quantifier, as Łukasiewicz maintains, because when he systematically exposes his syllogistic he is never inaccurate: the universal quantifier is missing exactly *only* in the expository proofs. Moreover, Smith (1982: 119) draws attention to the expression "one of the Ss", which is uncommon in the *Analytics* and might suggest that we are not dealing with a general term. (Cf. Striker 2009: 87–88, 104.)

Smith persuasively suggests that exposition consists in "taking out" an *indeterminate* case using letters, in the following way (this is the case of *Bocardo*):

(1) Some man is not honest	Premise
(2) Every saint is honest	Premise
(3) Let us consider one of the men who are not honest, e.g. *n*	Exposition
(4) *n* is a man	From (3)
(5) *n* is not honest	From (3)
(6) *n* is not a saint	From (2), (5)
(7) *n* is a man and not a saint	From (4), (6)
(8) Some man is not saint	From (7)

The exposed term is individual and not general, *pace* Łukasiewicz and Patzig, but no examination of a perceptible individual takes place, *pace* Alexander. For "*n*" is different from the other letters used in the syllogistic: unlike them, *n* does not replace a concrete term, but remains an "unassigned name" even when the syllogism-form is instantiated: it is a random "case" set out and the generalization in (8) "is justified because this proof could have been carried out about any other case" (Smith 1982: 125). Remarkably, the expository proof turns out to be very similar to modern logic procedures used in proofs called "universal generalization" and "existential instantiation" (cf. for example Barwise and Etchemendy 1992: 135–149).

Since in the proof by exposition of *Darapti*, starting from a universal premise, one can "take out" an individual having both properties mentioned in the premise, such an individual must exist. Thus the proof by exposition may also provide evidence for the hypothesis that Aristotle's syllogistic relies on the presupposition that empty terms, that is, terms that do not refer to any existing items, cannot occur in syllogisms. The hypothesis is needed to make sense of the fact that Aristotle admits *Darapti* and *Felapton* as syllogisms and accepts (C2) as valid, while the three inferences are invalid according to modern logic. In modern logic universal propositions do not have existential import (empty terms can occur in them), while particular ones do, and thus arguments with universal premises and particular conclusions are invalid (cf. Łukasiewicz 1951 and Corcoran 1974 for attempts to account for this feature of Aristotle's syllogistic when interpreting it from the point of view of modern logic).

The discussion of third figure syllogisms ends the task of finding out which pairs of categorical premises yield a syllogism. Aristotle investigates also some meta-theoretical results, that is, general properties of his deductive system as a whole (cf. *An. pr.* 1.23ff., 2). Importantly, in *An. pr.* 1.7 he states that all syllogisms can be reduced to the *universal* first figure ones, by reconducting *Darii* to *Camestres*, which in turn is reduced to *Celarent*, and *Ferio* to *Cesare*, which is reduced to *Celarent*.

Besides the assertoric syllogistic, Aristotle sketches a modal syllogistic (*An. pr.* 1.3, 8–22): an inferential system in which propositions have the form "It is possible *p*" and "It is necessary *p*". The modal system, however, is problematic and not well developed; I will not discuss it here.

Dialectic

Demonstrative and dialectical syllogisms satisfy the general requirements for syllogismhood (S1–S5); the main difference between them lies in the premises (*An. pr.* 1.1, 24a22–b12; *Top.* 1.1 100a25–101a4). Demonstrative syllogisms are used in sciences to reach scientific knowledge (they explain *why* things are in a certain way in a given field): their premises must be true, necessary, better known and more intelligible than the conclusion. Dialectical syllogisms are used in non-scientific reasoning occurring in exchanges between two people: the premises must be "accepted" by the interlocutor and are an *answer* to the question of which of two contradictory statements is to be accepted (demonstrative premises on the contrary are *assumptions*, since a *single* person carries out the demonstration).

Since we may encounter people who propose merely apparently sound arguments, Aristotle examines sophistical syllogisms: their premises are only apparently "accepted" and/or they only apparently satisfy requirements (S1)–(S5).

Once again, Aristotle's work in this area was groundbreaking: he was the first to offer systematic guidelines for dialectic discussions and a classification of fallacies.

The dialectical syllogism

The opening of the *Topics* informs us of its practical aim:

> **T9** The purpose of this study is to discover a method by which we shall be able to syllogize from accepted opinions (*endoxa*) about any problem proposed and, when submitting to argument ourselves, avoid saying anything contradictory.
>
> (1.1, 100a18–21)

Aristotle aims at providing us with the capacity for reasoning correctly and answering questions effectively, that is, avoiding to be led to contradiction, in dialectical arguments:

> **T10** Dialectical syllogism is that syllogism which syllogizes from *endoxa*.
>
> (1.1, 100a29–30)

Being a syllogism, a dialectical argument satisfies (S1)–(S5). As for its premises:

> **T11** Endoxa are the things believed by everybody or by the majority or by the wise–and by all the wise or the majority or the most famous and highly reputed of them.
>
> (1.1, 100b21–23)

The term *endoxos* is often translated as "accepted" or "reputable". Thus, *endoxa* are opinions accepted or believed as true by one of the groups of people listed in **T11**. There is evidence that lists classifying beliefs of different types of people were compiled at Plato's and Aristotle's time to help the dialectical arguer know what beliefs his opponent was likely to accept or reject (1.10, 104a8–11): this is crucial since, as **T10** suggests, his aim is to reach a certain conclusion from premises accepted by the interlocutor.

In fact dialectical arguments mainly occur in discussions between two interlocutors, a questioner and an answerer ("dialectical" comes from the Greek *dialegesthai*, "to converse"; cf. Moraux 1968, Slomkowski 1997, Smith 1997, Brunschwig 1967, 2007). The questioner asks, of some proposition *p*, "Is it the case that *p* (or not)?" By replying "Yes"-or-"No", the answerer chooses the thesis which he will defend (he can either reply according to his own opinions or impersonate someone, for example a famous thinker) and which the questioner will aim to get him to contradict.

This initial question is called "problem". Depending on whether the answerer replies "Yes"-or-"No", the questioner tries to "destroy" or "construct" the thesis, that is, to deduce a negative or affirmative conclusion. The "problem" must be something about which people have no agreed opinion, or the majority have an opinion opposite to the wise, or about which members of these groups have different opinions (1.11, 104b3–5).

The questioner then asks questions to establish the premises from which he will deduce the contradictory of the answerer's thesis. These questions have the form "Is it the case that *p*?", and require, again, a "Yes"-or-"No" answer. All premises are categorical propositions containing general terms. They all satisfy the "criterion of endoxicality": they must not express something that no one believes and must be more "accepted"

(by the type of person the answerer is or represents) than the conclusion which the questioner aims to deduce (cf. Le Blond 1939: 9–19; Evans 1977: 77–85; Barnes 1986; Smith 1997: xxiii–xxiv; Fait 1998). The answerer cannot refuse accepting premises satisfying this criterion.

Both the "problem" and the premises fall into three categories as regards their topic: ethical, physical and logical (1.14, 105b19–25). Also they are made of the four "predicables" (1.4–5), that is the predicate must be in one of the following four relationships to the subject: (1) "definition", that is, it expresses the essence of the subject, what this is, and is predicated exclusively of it (for example, "Man is a rational animal"); (2) "unique property", that is, it expresses an exclusive necessary attribute of the subject, but not its essence (for example, "Man is capable of learning grammar"); (3) "genus", that is, it expresses an essential attribute of the subject but not an exclusive one, since is predicated in common with other things (for example, "Man is an animal"); (4) "accident", that is, it expresses an attribute that may or may not belong to the subject (for example, "Man is white").

The answerer is expected to defend himself. Whenever a question is unclear he must protest that he does not understand it or clarify that the proposition put forward, if it contains an ambiguity, is in one sense true and in another false (in this case the obligation to answer "Yes"-or-"No" can be disregarded). If he rejects a premise he must explain why, and if he thinks that the refutation is unsound he must propose the solution to it.

These discussions were usually witnessed by an audience, who checked the interlocutors' behavior: that the questioner produced a sound refutation, and that the answerer was not too peevish and gave a prompt and correct solution if he rejected the argument.

Aristotle provides *topoi* (hence the title "*Topics*"), that is, a collection of general argument-forms, to help the questioner discover premises from which ultimately deduce his desired conclusion: conclusions of a certain form are produced by premises of a certain form. Conclusions are classified on the basis of the predicables, and so are the *topoi*: *topoi* to find premises for conclusions expressing accidents of the subject (*Topics* 2–3), *topoi* about the genus (4), about unique property (5), about definitions (6–7).

Thus the method promised in **T9** consists of the list of types of *endoxa* plus the *topoi*. Once the questioner knows the answerer's thesis and therefore individuates the conclusion he must try to reach, he must both look at the list of endoxical opinions to recognize the type of respondent he is dealing with and individuate a suitable *topos* on the basis of the form of the conclusion. He then instantiates the argument-form and checks the list of endoxical beliefs to see whether this fits his type of interlocutor. If it turns out to do so, he has a dialectical argument to use (cf. Smith 1997: xxv–xxviii).

There is evidence that the kind of discussion for which Aristotle provides guidelines was part of the program of Plato's Academy, presumably for enquiry on any given subject where the disputants argued not in competition but for the sake of examination ("gymnastic dialectic"; however this exercise might have become more agonistic at times). In fact Aristotle did not invent the practice, but took it over to "transform it into an art based on a scientific understanding of its subject-matter" (Smith 1997: 41).

Why would a method for such kind of discussion be useful, though? Aristotle mentions three reasons (*Top*. 1.2). First, it is useful for structured debating contests such as the gymnastic ones. Second, it is useful for argumentative situations in general because it enables us to discuss with the majority of people since we know what their opinions

are and have examined them. Third, it is useful for "philosophical sciences" (sciences which aim at understanding rather than at some practical goal): the capacity for surveying all the arguments for and against a given thesis will improve our capacity for discovering truths and falsities. Aristotle applies this method in many of his works: he reviews the opinions of his predecessors on a given subject and identifies the puzzles they pose before offering his own solution. Aristotle adds a further reason why the study undertaken in the *Topics* is useful: for the first principles of sciences (that is, roughly speaking, axioms of sciences). The passage is not clear and it has attracted much scholarly attention because it has been interpreted as claiming that through investigation of endoxical opinions we *discover* or *establish* the first principles of a science (cf. for example Irwin 1988). Some scholars, however, believe that the passage states, more modestly, that examinations of people's views are somehow useful in *discussing* scientific principles (Smith 1997: 52–55; Shields 2007: 130–133).

The sophistical syllogism

The sophistical syllogism is discussed in the *Sophistical Refutations*, often considered the ninth book of or an appendix to the *Topics*.

While demonstrative and dialectical syllogisms are forms of valid arguments (that is, actual syllogisms), sophistical syllogisms (or "sophisms"—a word that Aristotle does not employ but was used only later in antiquity) are only *merely* apparently syllogisms: they are fallacies, that is, arguments that are invalid or otherwise unsound because they contain a logical flaw. In other words, they do not accomplish what a syllogism is supposed to accomplish (**T1**–**T3**), but only appear to accomplish it (*Soph. el.* 1, 165a3–4). *Sophistical Refutations* is not about logical fallacies or incorrect reasoning *in general*, however, but specifically about those arguments that the sophists employed to trick their interlocutors in dialectical exchanges. The sophists embarrassed their interlocutors in front of large audiences by forcing them, through argument, to admit to a conclusion contradicting their original statement or by leading them to a variety of embarrassing conclusions. Plato in the *Euthydemus* had shown how to deal with some sophisms and their practitioners, but in *Sophistical Refutations* Aristotle, for the first time in Western thought, systematically analyses and classifies such sophisms.

Aristotle individuates five aims of a sophist: leading the interlocutor to contradiction (the primary aim), to drawing patently false, paraxodical, solecistic (that is, grammatically incorrect) conclusions, or making him "babble", that is, repeat the same thing over and over. He classifies the sophisms leading to contradiction into thirteen classes according to the thirteen fallacies they rely on. He distinguishes the fallacies into six linguistic ones—"Homonymy", "Amphiboly", "Combination", "Division", "Intonation", "Form of Expression"—and seven non–linguistic ones—"Accident", "*Secundum Quid*", "*Ignoratio Elenchi*", "Begging the Question", "Consequent", "False Cause", and "Many Questions". He then presents both diagnoses of and solutions to the sophisms. The diagnosis consists in identifying the logical flaw which makes the argument unsound. The solution is what the answerer should offer in discussion: he should, ideally, stop the sophism from reaching its baffling conclusion (mainly by asking clarifications of ambiguous questions) or, failing that, provide an analysis of the sophism revealing the fallacy it relies on right after the sophist has run it. The classification of fallacies has had an immense fortune: "Aristotle's principal list of thirteen fallacies […] still appears […] in many modern textbooks of logic" (Hamblin 1970: 9).

Aristotle claims that the dialectician must study fallacies in case he should unexpectedly find himself discussing with a sophist, so that he can defend himself and even attack the sophist with his very own weapons, if necessary. Moreover, in *Soph. el.*16 Aristotle mentions two advantages that study of sophisms brings to philosophy: first, by studying the linguistic fallacies we learn which words have several meanings, which is crucial for some important philosophical investigations such as that on the nature of goodness; second, by learning how not to be tricked in argument by someone else, we also become more attentive to fallacies we ourselves may commit when reasoning on our own.

What is a sophistical argument? Let us look at an example (*Soph. el.* 23, 179a18–19):

(1) Are phrases inanimate? Yes, they are.	T (Answerer's Thesis)
(2) Are the things which have sense animate? Yes.	Premise
(3) Do phrases have sense? Yes.	Premise
(4) Therefore phrases are animate.	Denial of T-From (2), (3)

The argument relies on the fallacy of Homonymy: "to have sense" means "to think" in (2) and "to mean" in (3), but the sophist (invalidly) concludes (4) as if "to have sense" had the same meaning in (2) and (3).

The general framework is the same as described for dialectical arguments, with the following exceptions. While a genuine dialectician would not propose as a "problem" "that which is clear to most people" (1.10, 104a5–7), in sophisms the initial question often appears to have an obvious answer on which everybody should agree. This allows the sophist to know what the answerer will reply and so what argument to propose. Like the dialectician, the sophist too asks several other "Yes"-or-"No" questions to establish the premises from which to deduce the contradictory of the answerer's thesis; but the sophist deduces that conclusion only apparently. While in dialectical arguments all premises must satisfy the "criterion of endoxicality", sophisms only mimic this feature: often their premises only *appear* endoxical.

Sophists then distort rules governing dialectical discussions. In fact sophistical syllogisms mimic dialectical ones. Compare **T10** with the definition of "eristical syllogism" ("eristical" is synonymous with "sophistical"):

> **T12** An eristical syllogism is one from apparent but not real *endoxa*, and an apparent one from *endoxa* or apparent *endoxa*.
>
> (*Top.* 1.1, 100b23–25)

A syllogism then is sophistical when (a) it has merely apparent *endoxa* as premises and is either valid (that is, a syllogism) or merely apparently so (that is, an apparent syllogism), or when (b) it is only apparently valid and with real *endoxa* as premises. An argument is not a genuine syllogism if the conclusion does not follow from the premises, but there are other ways in which it can fail to be a syllogism, that is, by failing to fulfill one of the conditions (S1)–(S5).

What is a merely apparently endoxical premise? I suggest that in the sophism above, (3) is apparently endoxical: (3) is endoxical in the sense in which the answerer grants it ((3a) "Phrases have meaning"), but it has a paradoxical hidden sense ((3b) "Phrases think") which the sophist uses (invalidly) to draw (4), the contradictory of (1). This apparent endoxicality is strictly dependent on the fact that (3) has two meanings, which

is also at the root of the invalidity of the syllogism. (3a) is maximally endoxical as it is believed by everybody (cf. **T11**), (3b) is maximally paradoxical as it is believed by nobody. Typically sophists exploit the two extremes of the range endoxical–paradoxical: when from (apparently) maximally endoxical premises a maximally paradoxical conclusion is deduced the sophism is most embarrassing (here paradoxical is equivalent to evidently false, absurd, impossible).

The argument above is invalid but (4) is really the contradictory of (1). Other sophisms, on the contrary, contain a genuine syllogism, but are unsound because the conclusion and the answerer's thesis are only apparently a contradictory pair since they fail to fulfill one of the following:

C1) genuine contradictories speak of one and the same thing;
C2) genuine contradictories contain exactly the same words/phrases;
C3) genuine contradictories speak of the same thing under the same respect, in relation to the same thing, similarly, and at the same time.

How do sophisms *trick* the sophists' interlocutors? Schreiber 2003 and Fait 2007 suggest that the answerer holds some false belief which makes him erroneously think that the sophism fulfills all the conditions for being sound. In the sophism above, the answerer does not realize that the argument is invalid because he holds the false belief that "to have sense" has in fact only one meaning (or that "linguistic signifiers are always univocal"). This interpretation does not represent correctly Aristotle's conception of sophisms, however. For, if the answerer held a false belief along the lines suggested, the sophism would turn out to be basically sound and not *sophistical*: if the sophist employs a false assumption which the answerer shares, then he is not merely apparently refuting his interlocutor.

Rather, in Aristotle's view, our sophism does not rely on the fact that *the answerer falsely believes* that "to have sense" has only one meaning; it is the questioner who invalidly infers the conclusion *as if* the answerer had granted that concession. The answerer's problem is that he *fails* to recognize and distinguish the two meanings with which the phrase is used *in the sophism*. This lack of awareness and preparation is the reason why the sophist's stratagem succeeds: the answerer is inattentive to different meanings because he does not normally need to be attentive, either because typically words are univocal or because the context clearly selects their meaning when they are multivocal (the reasons for the answerer's failure vary depending on the different fallacies).

Even if the unskilled answerer is incapable of spotting the fallacy, however, he also cannot fail to sense that *something* must be wrong: he is puzzled by the fact that a maximally paradoxical conclusion has been deduced from maximally endoxical premises. He is like someone who witnesses an illusionist's trick and is of course aware that it is a trick but is incapable of figuring out how it works:

> **T13** The sophistical argument presents an impasse [...]: for thought is bound fast when it does not want to rest because the conclusion does not satisfy it, but cannot advance because it cannot solve the argument.
>
> (*Eth. Nic.* 7.2, 1146a21–27)

Inducing this aporetic state is the sophist's aim.

Further reading

The standard edition of the *Organon* is Waitz 1844–1846; an edition of the whole *Organon* is contained also in Bekker 1831–1870. A reliable translation of the entire *Organon* can be found in Barnes 1984.

The standard edition of the *Categories* and the *De Interpretatione* is Minio-Paluello 1949, and an essential translation and commentary is Ackrill 1963. Bodéüs 2002 contains a good edition, translation and commentary on the *Categories*. A key book about the *De Interpretatione* is Whitaker 1996, which analyses the entire work chapter by chapter.

The *Prior Analytics* have been edited, with a commentary, by Ross 1949. Essential translations and commentaries: Mignucci 1961, Smith 1989, Striker 2009.

Editions of the *Topics* are Ross 1958 and Brunschwig 1967, 2007; the latter also contains a commentary on the text. An essential translation of and commentary on Books 1 and 8 of the *Topics* is Smith 1997.

Editions of the *Sophistical Refutations*: Ross 1958 and Strache-Wallies 1923. Essential translations and commentaries can be found in Poste 1866 (the only existing English commentary), Dorion 1995 and Fait 2007. There is only one monograph on the *Sophistical Refutations*: Schreiber 2003.

There are several good introductory chapters on Aristotle's logic: Kneale and Kneale 1962, Kapp 1975, Smith 1995, Shields 2007, Keyt 2009, Castagnoli and Cavini 2012, Smith 2012. Perry 1991 is a good handbook on Aristotelian logic.

References

Ackrill, J. L. (1963) *Aristotle's* Categories *and* De Interpretatione, Oxford: Clarendon Press.

Barnes, J. (ed.) (1984) *The Complete Works of Aristotle*, 2 vols., Princeton: Princeton University Press.

Barnes, J. (1986) "Aristotle and the Methods of Ethics", *Revue Internationale de Philosophie* 34: 490–511.

Barnes, J. and Bobzien, S. and Flannery, K. and Ierodiakonou, K. (1991) *Alexander of Aphrodisias: On Aristotle*, Prior Analytics *I.1–7*, London: Duckworth.

Barwise, J. and Etchemendy, J. (1992) *The Language of First-order Logic*, Stanford: CLSI.

Bekker, I. (1831–1870) *Aristotelis Opera*, 5 vols., Berlin: Reimer.

Bodéüs, R. (2002) *Aristote*. Catégories, Paris: Les Belles Lettres.

Brunschwig, J. (1967) *Aristote*. Topiques, *Livres I–IV*, Paris: Les Belles Lettres.

Brunschwig, J. (2007) *Aristote*. Topiques, *Livres V–VIII*, Paris: Les Belles Lettres.

Castagnoli, L. and Cavini, W. (2012) "Logica Antica", in U. Eco (ed.) *L'Antichita'. Vol. 14: Temi trasversali*, Milano: Encyclomedia Publishers: 110–61.

Corcoran, J. (1974) "Aristotle's Natural Deduction System", in J. Corcoran (ed.) *Ancient Logic and Its Modern Interpretations*, Dordrecht: Riedel: 85–131.

Dorion, L.-A. (1995) *Aristote*. *Les réfutations sophistiques*, Paris: Vrin.

Ebbesen, S. (1981) *Commentators and Commentaries on Aristotle's Sophistici Elenchi: A Study of Post-Aristotelian Ancient and Medieval Writings on Fallacies*, 3 vols., Leiden: Brill.

Evans, J. D. G. (1977) *Aristotle's Concept of Dialectic*, Cambridge: Cambridge University Press.

Fait, P. (1998) "L'éristique mise en formules", *Dialogue*, 37, 131–54.

Fait, P. (2007) *Aristotele*. *Le Confutazioni Sofistiche*, Roma-Bari: Laterza.

Hamblin, C. L. (1970) *Fallacies*, London: Methuen.

Hayduck, M. and Wallies, M. and Wendland P. *et al*. (1882–1909) *Commentaria in Aristotelem Graeca*, 23 vols., Berlin: Reimer.

Irwin, T. (1988) *Aristotle's First Principles*, Oxford: Clarendon Press.

Kapp, E. (1975) "Syllogistic", in J. Barnes and M. Schofield and R. Sorabji (eds.) *Articles on Aristotle.Vol. I: Science*, London: Duckworth: 35–49.

Keyt, D. (2009) "Deductive Logic", in G. Anagnostopoulos (ed.) *A Companion to Aristotle*, Oxford: Wiley-Blackwell: 31–50.

Kneale, W. C. and Kneale, M. (1962) *The Development of Logic*, Oxford: Clarendon Press, ch. II.

Le Blond, J. M. (1939) *Logique et méthode chez Aristote*. *Étude sur la recherche des principes dans la physique aristotélicienne*, Paris: Vrin.

Łukasiewicz, J. (1951) *Aristotle's Syllogistic*, Oxford: Clarendon Press.

Mignucci, M. (1961) *Aristotele*. Gli Analitici Primi, Napoli: Loffredo.
Mignucci, M. (1991) "Expository Proofs in Aristotle's Syllogistic", *Oxford Studies in Ancient Philosophy* suppl.: 9–28.
Minio-Paluello, L. (1949) *Aristotelis Categoriae et Liber de Interpretatione*, Oxford: Clarendon Press.
Moraux, P. (1968) "La joute dialectique d'après le huitième livre des *Topiques*", in G. E. L. Owen (ed.) *Aristotle on Dialectic:* The Topics. *Proceedings of the Third Symposium Aristotelicum*, Oxford: Clarendon Press: 277–311.
Patzig, G. (1968) *Aristotle's Theory of the Syllogism: A Logico-Philological Study of Book A of the* Prior Analytics, translated by J. Barnes, Dordrecht: Riedel.
Perry, W. T. and Hacker, E. A. (1991) *Aristotelian Logic*, Albany: State University of New York Press.
Pickard-Cambridge, W. A. (1984) *Aristotle*. Sophistical Refutations, in J. Barnes (ed.), *The Complete Works of Aristotle*, 2 vols., Princeton, NJ: Princeton University Press, vol. I.
Poste, E. (1866) *Aristotle on Fallacies or the Sophistici Elenchi*, London: Macmillan and Co.
Ross, W. D. (1949) *Aristotle's Prior and Posterior Analytics*, Oxford: Clarendon Press.
Ross, W. D. (1958) *Aristotelis Topica et Sophistici Elenchi*, Oxford: Oxford University Press.
Schreiber, S. G. (2003) *Aristotle on False Reasoning: Language and the World in the* Sophistical Refutations, Albany: State University of New York Press.
Shields, C. (2007) "Thinking: Scientifically, Logically, Philosophically", in C. Shields, *Aristotle*, NewYork: Routledge: 98–143.
Slomkowski, P. (1997) *Aristotle's* Topics, Leiden, New York, Köln: Brill.
Smiley, T. (1973) "What is a Syllogism?", *Journal of Philosophical Logic* 2: 136–54.
Smith, N. K. (1929) *Immanuel Kant's Critique of Pure Reason*, London: Macmillan.
Smith, R. (1982) "What is Aristotelian Ecthesis?", *History and Philosophy of Logic* 3: 113–27.
Smith, R. (1989) *Aristotle*. Prior Analytics, Indianapolis: Hackett.
Smith, R. (1995) "Logic", in J. Barnes (ed.) *The Cambridge Companion to Aristotle*, Cambridge: Cambridge University Press.
Smith, R. (1997) *Aristotle*. Topics*: Book I and VIII*, Oxford: Clarendon Press.
Smith, R. (2012) "Aristotle's Logic", in E. N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy*, URL: http://plato.stanford.edu/archives/spr2012/entries/aristotle-logic/.
Strache, I. and Wallies, M. (1923) *Aristotelis Topica cum libro de Sophisticis Elenchis*, Leipzig: Teubner.
Striker, G. (2009), *Aristotle*. Prior Analytics *Book I*, Oxford, New York: Clarendon Press.
Thom, P. (1976) "Ecthesis", *Logique et* Analyse 74: 299–310.
Waitz, T. (1844–1846) *Aristotelis Organon Graece*, 2 vols., Leipzig: Hahn.
Whitaker, C. W. A. (1996), *Aristotle's* De Interpretatione*: Contradiction and Dialectic*, Oxford: Clarendon Press.

Related chapters

20. Understanding, knowledge, and inquiry in Aristotle
23. First philosophy first: Aristotle and the practice of metaphysics
31. The Stoic system: logic and knowledge

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20
UNDERSTANDING, KNOWLEDGE, AND INQUIRY IN ARISTOTLE

Hendrik Lorenz

Plato's *Meno* famously ties attaining *epistēmē* ("knowledge") to working out the explanation of the relevant fact (*Meno* 98a1–6). Given the connection thus established, or recorded, between having *epistēmē* of a given fact and knowing its explanation, it has long been thought that it is better to translate the word *epistēmē* as "understanding" rather than as "knowledge" (cf. Burnyeat 1981: 102).

Plato thinks of understanding (*epistēmē*) as an especially authoritative and reliable cognitive state. But if understanding a given fact is especially authoritative and stable because it rests on grasping its explanation, can one understand the fact by grasping the explanation in just any way, or does one have to grasp that explanation in some especially authoritative and stable way? Does one have to understand the explanation, in order to understand the fact? This raises the specter of an infinite regress: to have the right kind of hold on the explanation of a given fact, one must grasp the explanation of that explanation, which again must be grasped in a suitable way, which requires grasping its explanation, and so forth. If, on the other hand, explanation runs out at some stage, understanding must ultimately rest on knowledge of things that are not themselves understood.

In the *Posterior Analytics*, Aristotle offers a theory of understanding that is recognizably indebted to Platonic antecedents and that offers a subtle and philosophically inventive way of answering some of the central questions that Plato's dialogues raise. Aristotle also defends a demanding conception of the kinds of subject matter that are open to understanding, and of the kinds of propositions that may feature in scientific demonstrations. Furthermore, Aristotle offers a brief, but intriguing sketch of how understanding is attained.

1. Aristotle's explication of understanding in *Posterior Analytics* 1.2–6

Aristotle ties *epistēmē* of a given fact to knowing its explanation "We think that we understand each thing without qualification," he says, "when we think we know of the explanation on account of which the state of affairs in question obtains, that it is its explanation, and that it is impossible for this to be otherwise" (*An. post.* 1.2, 71b9–12).

His careful formulation makes clear that understanding something is not just a matter of knowing its explanation. After all, one could know two facts, one of which explains the other, without knowing that one explains the other, or which one it is that explains the other. Rather, understanding a given fact requires knowing the fact that explains it as well as knowing that it is this fact that explains it. One important implication is that for something to count as a possible object of understanding, it must have an explanation.

Aristotle also follows Platonic antecedents in thinking that for some state of affairs to be an object of understanding, it must obtain of necessity. For Plato, the requirement that understanding must pertain only to states of affairs that are invariable arguably stems from the insistence that understanding must be secure and unerring (*Tht.* 152c5–6; 160d1–3).

Throughout the *Posterior Analytics*, Aristotle says strikingly little in defense of the idea that understanding pertains only to invariable states of affairs. One consideration that he does offer is that a person who understands something should be incapable of being persuaded otherwise about whatever it is that they understand (*An. post.* 1.2, 72b3–4). Plato conceives of understanding as a cognitive state that is optimally authoritative about its subject matter. And it seems philosophically interesting and potentially useful to conceive of a cognitive state that is optimally authoritative. Once one has such a notion available, one may wonder whether any human being is ever in a position to attain that cognitive state, and if so, whether all kinds of subject matter allow that kind of cognitive state. If understanding is an optimally secure cognitive state, in such a way that someone who understands something is, without being at all unreasonable, incapable of being persuaded otherwise about whatever it is that they understand, then it may well seem that only states of affairs that obtain invariably admit of understanding. For if it is a contingent matter that some state of affairs obtains, it would be unreasonable to take a position about the matter in question in such a way as to be incapable of being persuaded otherwise. After all, the state of affairs may have ceased to obtain, or may have come to obtain, and it would be unreasonable not to be persuaded by conclusive evidence either way.

In any case, Aristotle thinks that for a state of affairs to admit of understanding, it must obtain of necessity. He also thinks that for a person to understand something or other, they must know that the state of affairs in question obtains of necessity. Moreover, they must know of the explanation of that state of affairs that it is its explanation. Now, Aristotle has rather specific views about what counts as the explanation of a given state of affairs. His conception of an explanation is demanding, and as a result his conception of understanding is demanding as well (cf. Burnyeat 1981: 110). One form that an explanation may take, Aristotle thinks, is a demonstration. In fact he seems to think that this is the central case of an explanation. A demonstration, according to Aristotle, is a valid deductive argument from premises that are true, primary, immediate, more knowable than, prior to, and explanatory of the conclusion (1.2, 71b19–22)

Aristotle thinks that for a number of premises to be explanatory of a given conclusion, the complex state of affairs denoted by the premises must be explanatory of the state of affairs denoted by the conclusion. Consider the following argument:

(1) All animals are capable of perceiving.
(2) All humans are animals.

So: (3) All humans are capable of perceiving.

Aristotle thinks that the complex state of affairs denoted by propositions (1) and (2) is explanatory of the fact that all humans are capable of perceiving. Moreover, he takes it to be an objective fact about the nature of things that this explanatory relationship obtains among these states of affairs. Aristotle's claim that one fact is explanatory of another has little or nothing to do with what any given individual might or might not accept as a satisfactory or even illuminating explanation. The claim is rather that the one fact is explanatory of the other in that it is prior to the other in the structure of reality. According to Aristotle, reality itself is structured in terms of relations of priority and posteriority that hold between and among facts, and he thinks that we attain understanding of some domain of reality in important part by discovering how the facts that fall into that domain are related to one another in terms of priority and posteriority.

It may be useful to illustrate this idea. An Aristotelian natural philosopher knows that all animals, and only animals, are capable of perceiving. He also knows that humans are animals, and therefore that they are capable of perceiving. It is not that the natural philosopher discovers that humans are capable of perceiving, by recognizing that they are animals and that they are, therefore, capable of perceiving. That all human beings are capable of perceiving is made clear, Aristotle thinks, by observation and experience, in just the way that it becomes clear that all animals are capable of perceiving. Observation also shows that plants and inanimate objects are not capable of perceiving, and thus makes plain that only animals are capable of perceiving. Moreover, reflection on the deliverances of observation shows that the fact that all animals are capable of perceiving helps explain other facts about all animals, for example that they all have the sense of touch.

Based on these results it seems reasonable to think that there is an especially close relationship between being an animal and being capable of perceiving. On this way of thinking about things, it seems natural to take the fact that humans are capable of perceiving to derive from the facts that animals are capable of perceiving and that humans are animals. But to think this just is to think that those latter facts are prior to and explanatory of the former fact.

Furthermore, the valid, deductive argument in which the demonstration of a given fact consists must, Aristotle thinks, proceed from premises that are primary in the sense that they are immediate. That is to say that these premises must be genuine principles: for each such premise, no other proposition is prior to or explanatory of it (1.2, 72a7–8). In consequence, such premises are themselves indemonstrable: there can be no demonstration of them, or of their truth, because any such demonstration would have to proceed from premises prior to and explanatory of them, and there are no such premises.

That is as it should be: understanding of some demonstrable fact, conceived of as the optimally authoritative state concerning that fact, must rest on knowledge of the propositions that constitute its demonstration; that knowledge must itself take the form of an optimally authoritative state, or else the cognitive state that rests on it would fail to be optimally authoritative; if the propositions that constitute the explanation were themselves demonstrable, being in the optimally authoritative state with regard to them would require knowing their demonstrations (71b26–29); but demonstration cannot go on *ad infinitum*, on pain of understanding being impossible, "for it is impossible to survey infinitely many things" (1.3, 72b10–11). So, understanding of demonstrable facts must ultimately rest on knowledge of propositions that are explanatory of other propositions while themselves being indemonstrable, given that there are no other propositions that are explanatory of them.

Now one might worry that an indemonstrable proposition, or a fact denoted by such a proposition, is not itself knowable, let alone knowable in an optimally authoritative

way. Aristotle is aware of this worry (1.3, 72b11–15). The first thing to note about the worry is that, within the framework of Aristotle's theory, there is no problem with the idea that one can know indemonstrable propositions to be true. Recall the example we considered a while ago: that all animals are capable of perceiving is an indemonstrable proposition. It is known to be true, Aristotle thinks, on the basis of observation and experience. The problem is rather with the idea that there can be understanding of indemonstrable propositions. This problem is exacerbated by Aristotle's insistence that at least some of the indemonstrable propositions from which demonstrations proceed must be better known than the conclusions they help establish (1.2, 72a25–37).

While there are some questions about matters of detail, it is clear in outline how Aristotle means to resolve this difficulty. He thinks that there is a cognitive state that is more authoritative than demonstrative understanding and that can be achieved with regard to the indemonstrable propositions that constitute principles of a science, such as the proposition that all animals are capable of perception. In one context, he conceives of this kind of state as a non-demonstrative form of understanding (1.3, 72b18–22). It seems to be his considered view, though, that the optimally authoritative cognitive state that pertains to the principles of a science is best described not as a form of understanding, but as immediate insight: *nous* (*An. post.* 2.19, 100b5–17).

Now, there is room for the idea of a form of understanding that pertains to indemonstrable propositions which constitute principles of a science. Understanding some fact, Aristotle thinks, requires being able to explain why the fact holds. One type of explanation, as we saw, is a demonstration, an argument from premises that are explanatory of the proposition in question. This type of explanation is not available with regard to indemonstrable propositions. But it does not follow that nothing can be said by way of explaining why a given indemonstrable proposition is true.

There is a sense in which such propositions are self-explanatory. Recall the idea that there is an especially close relationship between the subject term and the predicate term that feature in the proposition that all animals are capable of perceiving. As Aristotle puts the point, while the fact that they are animals is explanatory of the fact that humans are capable of perceiving, what is explanatory of the fact that animals are capable of perceiving is just that they are what they are, animals (*An. post.* 2.18, 99b13–14, with "humans" for C, "animals" for B, and "capable of perceiving" for A; cf. 1.24, 85b24–25).

So in a rather thin sense there can be explanations of indemonstrable propositions. There is something which is explanatory of the truth of such propositions, namely the nature denoted by one of the terms featuring in those propositions, for example, the nature of animals. But Aristotle seems to think that this is a marginal, non-standard case of an explanation (cf. *An. post.* 2.19, 100b10–11), presumably because he thinks of explanations as arguments that present propositions which are explanatory of the fact that is being explained.

In so far as there are in a sense explanations of indemonstrable propositions that constitute principles of a science, we can see why Aristotle is ready to countenance a non-demonstrative form of understanding that pertains specifically to such principles (1.2, 71b18–22). But in so far as such explanations exemplify a marginal case of an explanation, we can also see why Aristotle thinks it best to describe the optimally authoritative cognition of principles of a science not as any form of understanding, but as immediate insight (*nous*), a special kind of cognitive state, to be distinguished from understanding (2.19, 100b5–17).

As we saw, Aristotle thinks that at least some of the indemonstrable propositions that constitute principles of a science must be better known than the conclusions they help establish. We are unlikely to be persuaded of this by the argument that Aristotle offers:

> Something always holds better of that because of which it holds: for example, that because of which we love something is better loved. Hence if we know and are convinced of something because of the primary things, then we know and are convinced of them better, since it is because of them that we know and are convinced of the posterior items.
>
> (1.2, 72a29–32)

The general claim seems to be this: if *b* is F because *c* is F, then *c* is more F than *b*. This seems dubious, if only because one can easily think of cases in which *b* is F because *c* is F, and *b* is just as F as *c*. Suppose that a sculpture is beautiful because its shape is. Why could not the sculpture be just as beautiful as its shape?

One might reject the general principle that Aristotle appeals to, but accept the claim that if you are convinced of a given conclusion because you are convinced of premises that entail the conclusion, you are more convinced of the premises than of the conclusion, on the grounds that your conviction with regard to the conclusion is infected both by any uncertainty about the premises and by any uncertainty about the inference from those premises to the conclusion (with Barnes 1993: 101–102). However, it seems perfectly possible (as Barnes, *ibid.*, acknowledges) to be entirely certain both about the premises and about the inference and hence to be fully convinced of the conclusion, so that one is no more convinced of the premises than one is of the conclusion.

Nonetheless, Aristotle's theory contains the resources for a better argument. Recall that all of the propositions that belong to a given science come to be known through observation and experience. Reflection on the propositions known through observation and experience enables practitioners of the science to work out that some of these propositions are explanatory of other ones, and to make progress towards achieving a complete articulation of the domain in question in terms of relationships of priority and posteriority. In the process, they discover what the indemonstrable propositions are that constitute principles of the science. These principles will be explanatory of a large number of facts in the domain in question. If all of the facts in the domain can be explained by deductive arguments from the limited number of propositions that constitute these principles—and if this turns out to be the only, or by far the most economical, way of organizing the domain in terms of relationships of priority and posteriority—then it would seem that practitioners of the science have found new reasons for accepting the truth of just those propositions that turn out to be principles of the science in the fact that these principles have the enormous explanatory power that they have been discovered to have. This fact elevates the principles over the other propositions that fall within the science.

Aristotle holds that the premises from which demonstrations proceed must be not only true, but true of necessity (*An. post.* 1.4, 73a24; 1.6, 74b26–27). He has good reason for holding this. As we saw, he accepts a conception of understanding according to which understanding a given fact requires knowing that the fact obtains of necessity. He takes it to be the role of a demonstration to impart understanding of the relevant conclusion (1.2, 71b17–19). So the demonstration should not only be explanatory of the truth of the conclusion. It should also make perspicuous the fact that the conclusion holds of necessity (cf. 1.6, 75a12–17). But the only way it could do this is by relying on

premises all of which are themselves true by necessity, and moreover are such that their necessary truth is evident. The virtue of propositions in which the specific defining feature of something is predicated of that same thing is that their necessary truth is evident right away, against the background of the relevant definitions. This is one reason why such propositions feature prominently among the principles of a science, and among the premises of demonstrations.

2. Scientific propositions

Aristotle offers an elaborate characterization of the kinds of propositions that he thinks may feature in demonstrations. He refers to such propositions as universal, and he explicates what it is for a proposition to be universal in terms of two requirements (*An. post.* 1.4, 73b25–27): for a given proposition to be universal, it must hold "of every case" (73a28–32), and it must hold "in itself" or *per se* (73a34–73b24).

Now it is clear what it is for a proposition to hold "of every case:" the predicate term must hold of the subject term without exception and invariably. For example, animals are capable of perceiving, without exception and invariably. However, it is not clear right away what it is for a proposition to hold *per se*. On one influential interpretation, Aristotle's conception of a *per se* proposition is extremely stringent. As we shall see, that interpretation faces a number of difficulties. Most importantly, it makes it hard to see how Aristotle could have thought that his conception of a demonstrative science can fit the practices of, say, Greek geometry or, for that matter, the needs of his own natural philosophy. We shall see that an alternative interpretation is available, on which Aristotle's conception of a *per se* proposition is much more liberal. It will be worth our while, in the present section, to have a close look at Aristotle's discussion of *per se* propositions. Doing so will also serve to introduce readers to the kind of detailed exegetical work on which surveys such as the present one rest.

Here are the crucial parts of Aristotle's discussion of *per se* propositions in *Posterior Analytics* 1.4:

> Pasage 1 (73a34–b5): Something holds of an item *per se* ("in itself") both if it holds of it in what it is—for example, line of triangles and point of lines (their essence comes from these items, which inhere in the account which says what they are)—and also if what it holds of itself inheres in the account which shows what it is—for example, straight holds of lines and so does curved, and odd and even of numbers, and also prime and composite, and equilateral and oblong; in all these examples, there inheres in the account which says what they are in the former case line and in the latter case number. Similarly in other cases too it is such things which I say hold of things *per se*. What holds in neither way I call incidental, for example, musical or white of animal.

> Passage 2 (73b10–16): Again, in another way what holds of something because of itself holds of it *per se*, and what does not hold because of itself is incidental. For example, if there was lightning while he was walking, that was incidental: it was not because of his walking that there was lightning—that, we say, was incidental. But what holds because of itself holds *per se*—for example, if something died while being sacrificed, it died in being sacrificed, since it died because of being sacrificed, and it was not incidental that it died while being sacrificed.

In Passage 1, Aristotle introduces a notion of being *per se* that is tied to definitional connections between the subject term and the predicate term of a given proposition. Such connections can run both ways: the predicate term may feature in the definition of what is denoted by the subject term, or the subject term may feature in the definition of what is denoted by the predicate term. For example, if a triangle is defined as a figure contained by three straight lines (cf. Euclid, *Elements*, Definition 19), then the term "line" features in the definition of the term "triangle," and the proposition that (for example) all triangles are contained by lines is one whose predicate term features in the definition of its subject term. In this way, the necessary truth of the proposition in question is evident right away, against the background of the definition of the subject term. In fact, we have already encountered such a proposition, namely the proposition that all animals are capable of perceiving.

On the other hand, if the definitions of straightness and curvedness both employ the term "line," then the proposition that, say, (some) lines are straight is one whose subject term features in the definition of the predicate term (cf. Euclid, *Elements*, Definition 4). The latter proposition is of course not one that holds "of every case," as not all lines are straight. However, there are propositions that exhibit this direction of definitional connection and that do hold of every case, such as the proposition that all lines are straight or curved (73b18–24). And perhaps the definitions of straightness and curvedness will make perspicuous that every line must be either straight or curved, and so will make perspicuous that the proposition that all lines are straight or curved holds of necessity.

Aristotle takes being *per se* and being incidental to be contradictories: if the connection between subject term and predicate term of a given proposition is not *per se*, it is incidental, and vice versa. But Aristotle is operating with different, though systematically related, notions of being *per se* and being incidental. In Passage 2 he introduces a notion of one thing holding of another *per se* that turns on an explanatory connection between the two items, without requiring a definitional connection between them. When an animal dies while being sacrificed, there is an explanatory connection between its death and the fact that it was sacrificed. It died because it was sacrificed, and so, Aristotle explains, dying holds of being sacrificed *per se*, precisely in that the animal's death comes about because of the fact that it is being sacrificed. As a result, the proposition that animals that get sacrificed die counts as a *per se* proposition. Now, one might think that this is just another case of a proposition in whose case the predicate term ("die") is contained in the definition of the subject term ("animals that get sacrificed"). After all, one might think that it is part of what it is for an animal to be sacrificed that it dies in the process.

However, this cannot be the point of the example. Aristotle has already dealt with a notion of *per se* propositions that turns on definitional connections between the subject term and the predicate term of the proposition in question. He is now introducing a different notion of one thing holding of another *per se*. In explaining this notion, he makes no reference at all to definitions, let alone to definitional connections between things. What is crucial to this notion of *per se* is that there is an explanatory connection between the two things in question. Now, explanatory connections may take the form of definitional connections. For example, animals are capable of perceiving because of their nature as animals. The nature of animals as such, specified in the definition, determines, and hence explains, the fact that all animals are capable of perceiving.

Aristotle, however, thinks, reasonably enough, that explanatory connections need not take the form of definitional connections. There are explanatory connections, he

thinks, between any cause and effect, regardless of which of the four kinds of cause that he recognizes is in play (*An. post.* 2.11, 94a20–24). So, since there is an explanatory connection between, for instance, a given moving cause and its effect, any proposition which suitably connects a moving cause and its effect will count as a *per se* proposition of the kind that is introduced in Passage 2. One such proposition is one that Aristotle offers as an example in *An. post.* 2.11: "men make war on those who have wronged them first" (94b4–5). When one community wrongs another, the injured community tends to retaliate by making war, and so wronging people first is the moving cause of being made war on.

This example of a *per se* proposition raises an important question to which we shall return later, but which it is worth stating now. Plainly it can happen that one city wrongs another, without getting involved in a war with that city. So it would seem that this proposition, and propositions like it, will fail to hold "of every case," and so will fail to count as universal propositions. The fact that Aristotle includes the proposition that men make war on those who have wronged them first in what looks to be an explanatory syllogism (94b2–8) suggests that he is prepared to accept that such propositions may feature in demonstrations. In fact, if he wants to be able to demonstrate and understand such facts about natural substances as the fact that humans have hands, or that dogs have four legs, he had better allow *per se* propositions that do not hold of every case as conclusions of demonstrations.

Let us take stock. Passages 1 and 2 make clear that Aristotle operates with two distinct contrasts between *per se* and incidental propositions. One notion of a *per se* proposition requires a definitional connection between the subject term and the predicate term of the proposition. Another, looser, notion requires only an explanatory connection between the two terms. With regard to both notions of a *per se* proposition, there are contrasting notions of incidental propositions. So a proposition that features an explanatory connection between subject term and predicate term, but not a definitional connection, will be both incidental (in that it fails to be a definitional *per se* proposition) and *per se* (in that it features an explanatory connection).

Aristotle's prime example of a *per se* proposition, the proposition that triangles have interior angles equal to two right angles ('the 2R property'), is just such a proposition. The definition of triangle makes no reference to the 2R property; nor does the definition of the 2R property make reference to being a triangle. Nevertheless, all triangles have the 2R property because they are triangles: it follows from the nature of a triangle, against the background of certain other pertinent facts, that all triangles have the 2R property. Elsewhere Aristotle speaks of such properties as *per se* incidentals, and makes it clear that he takes it to be a crucial task of a given science to demonstrate the truth of propositions in which *per se* incidentals are predicated of items that fall into the domain in question (*An. post.* 1.7, 75a42–b2; cf. *De an.* 1.1, 402b16–403a2; *Metaph.* B.2, 997a18–21; note also *Metaph.* Δ.30, 1025a30–32).

We should now note that Aristotle clearly thinks of definitional *per se* propositions as a special case of explanatory *per se* propositions. This becomes clear when he says that

> in the case of what is understandable without qualification, whatever is said to hold of things *per se* in the sense of inhering in what is predicated or of being inhered in, holds of them both *because of themselves* and of necessity
>
> (1.4, 73b16–18).

Aristotle is here focusing on propositions that are universal and hence open to understanding. He says that among such propositions, ones that exemplify the definitional notion of a *per se* proposition are also explanatory propositions, regardless of whether their subject term inheres in the definition of the predicate term or the other way around. In the case of such propositions, the nature corresponding to the subject term determines, and hence explains, the fact that the predicate term holds invariably of the subject term; or alternatively, the nature corresponding to the predicate term determines, and hence explains, the invariable connection between the two terms.

Now, on one influential interpretation of Aristotle's conception of a universal proposition, it is specifically and exclusively the definitional notion of being *per se* that is relevant to that conception. This is the view put forward in Ross' and in Barnes' commentaries on the *Posterior Analytics* (Ross 1949: 519–22; Barnes 1993: 112–14, 117–22). This interpretation yields a very stringent conception of what counts as a universal proposition. Alternatively, the notion of being *per se* that is relevant to Aristotle's conception of a universal proposition is the more general notion of an explanatory *per se* connection, with definitional *per se* propositions constituting a special case among explanatory *per se* propositions. That alternative interpretation yields a more liberal conception of what counts as a universal proposition (an interpretation along these lines is hinted at, but not developed, by Burnyeat 1981: fn. 29).

We have already seen decisive evidence that Aristotle thinks of definitional *per se* propositions as a special case of explanatory *per se* propositions (73b16–18). Furthermore, Aristotle plainly takes the proposition that all triangles have the 2R property to be a universal proposition, and therefore a *per se* proposition in the sense relevant to being a universal proposition (73b32–74a3). But as we have seen, that proposition is not a definitional *per se* proposition. So on the stringent conception of a universal proposition that is entailed by the interpretation favored by Ross and Barnes, Aristotle is being confused or careless when he offers that proposition as an example of a proposition that is universal and *per se*.

On the more liberal conception that results from the alternative interpretation, that proposition is a perfectly good example of a universal proposition, given the notion of a universal proposition that Aristotle introduces and explains in *Posterior Analytics* 1.4. Moreover, Aristotle's suggestion in 1.4 that a non-definitional *per* se proposition, such as the proposition that all triangles have the 2R property, may feature in demonstrations cannot be discounted as the result of momentary confusion or carelessness on his part. For as we have seen, Aristotle makes it clear elsewhere that he regards demonstrating the truth of just such propositions as a prominent task of any given science (1.7, 75a42–b2). The alternative interpretation, which yields the more liberal conception of a universal proposition, seems for these reasons to be preferable.

There is reason to think that Aristotle's conception of propositions that are *per se* and universal is even more liberal than it may appear to be. To begin with, we should note Aristotle's demand that all of the propositions that feature in a given science be *per se* propositions. Consider the following passage:

> Since in each kind whatever holds of something *per se* and as such holds of it of necessity, it is clear that scientific demonstrations are concerned with what holds of things *per se* and that they proceed from such items. For what is incidental is not necessary.
>
> (*An. post.* 1.6, 75a28–31)

Evidently, Aristotle is here operating with contrasting notions of being *per se* and being incidental on which incidental propositions fail to hold of necessity. Now there are many propositions that, on Aristotle's view, hold of necessity, whose status as *per se* propositions is questionable (cf. Lennox 2001: 10). Take, for example, the proposition that all isosceles triangles have the 2R property, or a proposition which featured in Section 1, that all human beings are capable of perceiving. At the end of *An. post.* 1.4, Aristotle observes that the demonstration of having the 2R property applies universally to triangles. The next sentence reads: "To the other items it applies in a certain way not *per se*."

Aristotle's view would seem to be that being *per se*, and hence also being universal, comes in different grades. In consequence, he thinks that the proposition that all triangles have the 2R property is more strictly speaking a *per se* proposition than the proposition that all isosceles triangles have that property. So there is a strict sense of being *per se* on which the latter proposition does not count as a *per se* proposition ("in applies in a certain way not *per se*"). But Aristotle also operates with a looser notion of being *per se*, such that the proposition that all isosceles triangles have the 2R property counts as a *per se* proposition. It is this looser notion that must be in play when he asserts that propositions which are not *per se* do not hold of necessity and have no place in a science.

Relying on ideas introduced in Section 1, we can make good sense of this gradation. Recall the idea that there is an especially close relationship between being an animal and being capable of perceiving. After all, all animals, and only animals, are capable of perceiving; furthermore, the fact that all animals are capable of perceiving helps explain other facts that pertain to all animals, for example that they have sense-organs. On this basis it seems reasonable to think that while animals are capable of perceiving because of what they are, animals, humans, for instance, are capable of perceiving because they are animals. But now notice that it is part of human nature that humans are animals. Being animals is not the specific defining feature of human beings, but it is part of the nature of human beings. So there is also a sense in which humans are capable of perceiving because of what they are: human beings. After all, their nature determines, and hence explains, that they are capable of perceiving. And so it stands to reason that there is a sense in which the proposition that all human beings are capable of perceiving counts as an explanatory *per se* proposition.

Similarly, there is an especially close relationship between being a triangle and having the 2R property. As we saw, it is not that there is a definitional connection between being a triangle and having that property. But all triangles, and only triangles, have that property, and the fact that all triangles have that property can be demonstrated by appeal to the nature of triangles and certain other pertinent facts. Against the background of those facts, it is determined by the nature of triangles that all triangles have that property. We saw good reason for thinking that Aristotle recognizes the proposition that all triangles have the 2R property as an explanatory *per se* proposition. This makes good sense. In a clear sense, all triangles have that property because of what they are, triangles.

Now note, however, that it is part of being an isosceles triangle that isosceles triangles are triangles. In consequence, there is a sense in which all isosceles triangles have the 2R property because of what they are, isosceles triangles. But this sense, one might want to say, is derivative: it derives from the fact that isosceles triangles are triangles. It does not derive directly from facts that distinguish isosceles triangles from other kinds of triangles. The specific defining feature of isosceles triangles as such plays no role in

determining that all isosceles triangles have the 2R property. So it makes good sense for Aristotle to think that being a *per se* proposition comes in different grades, and that the proposition that all triangles have the 2R property is a *per se* proposition in a strict sense, whereas the proposition that all isosceles triangles have that property is not a *per se* proposition in that strict sense, though it is a *per se* proposition, and hence a universal proposition, in a derivative and extended sense.

3. How to grasp principles?

We have already seen in outline how Aristotle thinks the facts that fall within the domain of a science are discovered. They are discovered by observation of and experience with members of that domain. Aristotle has rather little to say about this process of discovery. He thinks that by relying on perception, memory, and what we might call concept-formation ("experience," cf. Everson 1997: 221–8), people come to know the truth of propositions such as those that all humans are capable of perceiving, and that all animals are capable of perceiving, typically progressing from the more specific to the more general in a process that Aristotle refers to as induction (*An. post.* 2.19, 100b1–5). The truth of some of those propositions is plain to anyone. In the case of other propositions, such as the proposition that all viviparous animals furnished with feet have hair (*Hist. an.* 3.10, 517b4–5), coming to know them to be true may require a good deal of empirical work. But in any case, it is by observation and experience, Aristotle thinks, that people come to know to be true the propositions that fall within the domain of a given science, including those propositions that constitute principles of the science.

Now one might think that something quite mysterious happens, according to Aristotle, at this stage in the development of understanding. It may seem as if Aristotle thinks that once the practitioner of a science hits on those propositions that constitute the principles of the science in question, they right away intuit the immense intelligibility and explanatory power of those propositions and all of a sudden come to see the whole domain in light of those principles. In other words, one might think that at this stage they are supposed to suddenly acquire immediate insight (or "comprehension," *nous*) into the relevant principles and, deriving from that insight, comprehensive understanding of the domain in question.

However, there are good reasons for thinking that Aristotle conceives rather differently of the acquisition of immediate insight. To see this, it is important to distinguish between knowing to be true a given proposition that in fact is among the principles of a science, and having the optimally authoritative grasp of that proposition. There are two crucial tasks that practitioners of a science must complete before they attain immediate insight with regard to the relevant indemonstrable propositions.

The first task is this. With regard to the features denoted by the predicate terms that fall within the domain in question (for example, "are capable of perceiving," "have lungs," "have hair," and the like), they must identify the correct level of generality at which to frame the privileged *per se* propositions, those propositions, that is, that are *per se* in the strict sense (cf. *An. post.* 1.4, 1.5). In geometry, this involves identifying the especially close relationship between the 2R property and triangles. In biology, it involves, of course among many, many other things, identifying the especially close relationship between being an animal and being capable of perceiving.

The second task is to work out which propositions are definitional, and how the vari-

ous definitional propositions interact so as to capture the natures or essences of the items that fall into the domain (cf. *An. post.* 2.13 and its comments on "how to hunt out the items predicated in what something is," 96a22–23). Completing that second task allows the practitioner of the science to distinguish, among those propositions that are *per se* in the strict sense, between ones that exhibit definitional connections (in one direction or the other) between subject term and predicate term, and ones that are explanatory without exhibiting such a definitional connection. In completing these tasks, Aristotelian scientists will spend a great deal of time and effort collating and organizing facts and reasoning about them. Immediate insight is not a capacity for discovering principles of a science. Rather, it is the optimally authoritative grasp of those principles that one attains by identifying them as principles: that is to say, by working out what roles they play in the explanations that pertain to the domain in question, in a painstaking process of organizing relevant facts and reasoning about them.

4. Understanding the natural world

Aristotle's conception of an explanation is demanding, and as a result his conception of understanding is demanding. The conception of understanding presented in *An. post.* 1.2–6 and discussed in Section 1 is so demanding that many facts that fall into the domain of natural philosophy will turn out not to be susceptible to understanding. Consider the fact that mice, being viviparous animals furnished with feet, have hair. Now, we know that there are hairless mice. So the proposition that mice have hair does not hold "of every case" and is therefore not a universal proposition. The same goes for many other facts of biology.

Aristotle is aware of this and still thinks that certain facts of biology that hold only for the most part can be demonstrated. Since the operative notion of a demonstration is that of a deduction which imparts understanding (1.2, 71b17–19), Aristotle would seem to be committed to thinking that such facts are open to understanding. He notes that

> you cannot understand through a demonstration what happens by chance. What happens by chance is neither necessary nor for the most part—it is what happens apart from these—and demonstrations are concerned with items of one or the other of these types. For every deduction proceeds either through necessary propositions or through what holds for the most part. If the propositions are necessary, the conclusion too is necessary; and if they hold for the most part, so too does the conclusion. Hence if what happens by chance is neither for the most part nor necessary, there will be no demonstration of it.
>
> (*An. post.* 1.30, 87b19–27)

Aristotle is treating propositions that hold for the most part alongside propositions that hold of necessity as capable of serving as premises and conclusions of demonstrations. In another passage he observes that there will be immediate (that is, indemonstrable) propositions that hold not universally, but only for the most part, and that play the role of premises in demonstrations whose conclusions also hold only for the most part.

> Some things come about universally (they either are or come about in this way always and in every case), others not always but for the most part—for

> example, not every man has hair on his chin, but they do for the most part. In such cases the middle term must also hold for the most part. For if A is predicated universally of B and B universally of C, it is necessary for A to be predicated of C always and in every case (this is what it is to be universal—to hold in every case and always). But it was supposed to hold for the most part. For what holds for the most part, then, there will be immediate principles which hold or come about in this way for the most part.
>
> (*An. post.* 2.12, 96a8–10)

Now in a way it does not come as a surprise that Aristotle thinks there can be demonstrations and understanding with regard to, say, the facts of biology. But coming from the introduction of Aristotle's conception of understanding in *An. post.* 1.2–6, and from Section 1 of the present chapter, we must note a very significant relaxation in Aristotle's conception of a demonstration, and of when it is that someone understands something. In 1.2–6, Aristotle firmly insists on the need to know that the fact in question holds of necessity, if one is to understand that fact (71b9–16). In consequence, he thinks that the premises of demonstrations must hold of necessity, and that their necessity must be evident (75a12–17). Later on, he relaxes that requirement, adding that the premises of demonstrations, and the principles of a science, may hold, not of necessity, but only for the most part. One upshot of this is that with regard to certain facts that fall within the domain of a given science, one can understand such facts without knowing them to hold of necessity. In fact, to understand them one would have to know that they do not hold of necessity, but only for the most part.

However, this may not be as dramatic a departure as it initially appears. We related the demand that understanding pertain only to facts that hold of necessity to the Platonic, and perhaps Socratic, notion of understanding as an optimally authoritative cognitive state, and the idea that, as such, it should be secure and unerring. Aristotle seems to invoke that notion when he says that a person who understands something should be incapable of being persuaded otherwise about whatever it is that they understand (1.2, 72b3–4). This notion of understanding motivates restricting what is understandable to what is invariable, to what, as Aristotle puts it, cannot be otherwise.

Now, certain facts of biology, Aristotle thinks, do not hold invariably but only for the most part. Adult men have hair on their chins for the most part, but not invariably. However, Aristotle also thinks that it is a perfectly secure and reliable fact that for the most part, adult men have hair on their chins. According to Aristotle's conception of the natural world, the natures of living things are actively at work in the world, making plants and animals develop and advance towards their complete realization as members of their kinds. These natures, he thinks, can be fully relied on forcefully, and by and large very effectively, to drive the creatures they animate towards the exact same conditions of complete realization, throughout all of time: Aristotle thinks that the natural world exhibits a stable and orderly arrangement which is guaranteed by the very structure of reality (*Metaph.* Λ.10, 1075a11–25), and which in turn guarantees that the conditions in which the lives of the various kinds of biological organisms play themselves out are permanently and securely conducive to the natural forms of life of those kinds of organisms. Aristotle thinks that occasionally goal-directed natural processes, such as the growth and development of an individual human being, go awry and fail to result in the complete realization of the natural organism in question. Given how complex some of those processes are, and how many factors need to be in place for them

to happen, this is not surprising. But Aristotle also thinks, for the reasons mentioned, that such failures are relatively rare and marginal, and can be relied on to remain so throughout all of time.

So, given Aristotle's conception of the natural world, the proposition that mice have hair, for instance, is secure and, in a way, invariable, even though it does admit of exceptions. As a result, one can be in a secure and unerring cognitive state with regard to such propositions, and one can know that, and why, such propositions hold securely and reliably. With regard to such propositions, too, one can be in a state that makes one incapable of being persuaded otherwise about the matter, without being at all unreasonable. So it would seem to make sense that one can, after all, understand facts of this kind.

References and further reading

Barnes, J. (1993) *Aristotle*: Posterior Analytics, *Translated with a Commentary*, Oxford: Clarendon Press.

Burnyeat, M. (1981) "Aristotle on Understanding Knowledge," in E. Berti (ed.), *Aristotle on Science: The* Posterior Analytics, Padua: Editrice Antenore, 97–139.

Everson, S. (1997) *Aristotle on Perception*, Oxford: Clarendon Press.

Lennox, J. (2001) "Divide and Explain: the *Posterior Analytics* in Practice," in his *Aristotle's Philosophy of Biology: Studies in the Origins of Life Sciences*, Cambridge: Cambridge University Press, 7–38.

Ross, W. D. (1949) *Aristotle's* Prior *and* Posterior Analytics, *A Revised Text with Introduction and Commentary*, Oxford: Clarendon Press.

Related chapters

10. Plato's philosophical method: enquiry and definition
11. Plato's epistemology
19. Aristotle: logic
21. Aristotle: psychology
22. Aristotle's philosophy of nature
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21
ARISTOTLE: PSYCHOLOGY

Giles Pearson

When we refer to Aristotle's "psychology," we refer to his investigation into the nature of *psuchē*. "*Psuchē*" is standardly translated by "soul." Aristotle explains that that which has *psuchē* is distinguished from that which has not by *life* (*De an*. 2.2, 413a21–22), and he notes:

> We say that the thing lives if but one of the following is present—intellect, perception, movement and rest in respect of place, and furthermore the movement involved in nutrition, and both decay and growth.
>
> (413a22–25, translations are from Hamlyn 1993)

Now although Aristotle thinks that many of these capacities cannot be possessed by living things in isolation, as, for example, perception cannot occur in creatures that do not have the nutritive capacity, the most basic capacities can exist in isolation. Plants partake of nutrition and growth and decay but, Plato's assertions to the contrary (for example, *Timaeus* 77a–c), cannot, in Aristotle's view, perceive (see, for example, *De an*. 2.3, 414a32–414b1; 2.12, 424a32–424b3, and, on the latter, Murphy 2005). Plants are nonetheless *alive* owing to the capacities they do possess, and this means that they are endowed with *psuchē*. At this point, "soul" manifests itself as an unhappy translation of *psuchē*. The claim that plants "have souls" sounds far odder than the claim that plants "are alive in so far as they possess the capacities of nutrition and growth/decay," but the latter is all that Aristotle appears to mean in claiming that plants are one of things that "possess *psuchē*." This also reveals that an investigation into *psuchē* is somewhat broader than an investigation into *psychology*. Although the English word is in part derived from the Greek word, "psychology" is generally understood to refer to "the science of the *mind*," and just as plants do not possess souls, nor do they possess minds. Mental states or capacities pick out *some* of the states or capacities that are studied within Aristotle's investigation into *psuchē*, for example, perception, thought, memory, and desire; but what we might call "psuchic states" extend beyond this to, for example, growth and decay, and nutrition. (I shall use the adjective "psuchic" to draw attention to this key difference from the connotations of the English term "psychology.") The key for Aristotle, then, is that *psuchē* is that which we attribute to living things in so far as they live and owing to which they are alive. In this sense, a human being, a bear, a lizard, a fish, a tree, and a blade of grass, stand on one side, and things like rocks, water, earth, and

artifacts, stand on the other. In considering the nature of *psuchē*, Aristotle is asking: what is it by means of which living things *live*?

However, as Aristotle explicitly acknowledges (*De an.* 2.2, 414a4–14), the phrase "that by means of which we live" could refer to two different things. In employing it, we might mean to pick out the matter or material which *composes* living things, in the case of animals this would be the body, or in the case of plants, organic materials more generally. Or we might mean to pick out the various *capacities* of living creatures as such, capacities that employ these physical organs or functioning parts, such as, nutrition, perception, memory, desire. It is the latter that Aristotle wants to investigate in his psychological works. Although elsewhere he does indeed undertake a large number of investigations into organic matter—biological investigations—and although the investigator into *psuchē* obviously cannot ignore the body or the soul's relationship to it (see *De an.* 1.1 and 2.1–2), the purpose of Aristotle's investigations into *psuchē* is primarily to examine the various capacities that employ this organic matter.

Prior to his discussion of particular psuchic capacities, Aristotle provides a general account of how *psuchē* relates to the body, and I shall follow suit: first sketching his general account, before turning to consider some of the specific capacities. I shall close with some remarks on the highly contentious issue of whether Aristotle's views can be of interest to contemporary philosophers investigating the mind–body problem.

1 General account of the soul–body relation

In *De anima* 2.1 Aristotle attempts to provide a general specification of what *psuchē* is. He ends up providing several such characterizations. A key one is of *psuchē* as "the first actuality of a natural body which has life potentially" (412a27–28). Aristotle claims that whatever has organs will be a body of this kind, and notes:

> Even the parts of plants are organs, although extremely simple ones, for example, the leaf is a covering for the pod, and the pod for the fruit; while roots are analogous to the mouth, for both take in food.
>
> (412a28–412b4; see also *De an.* 2.2, 414a22–28)

On this notion of "organ" (*organon*), plants possess organs: having some natural operative components or functioning parts seems to be what is intended (an *organon* is simply an instrument or tool for making or doing something). This prompts Aristotle to provide a further characterization of *psuchē* as "the first actuality of a natural body which has organs" (412b5–6). He explains the sense in which *psuchē* is the *first actuality* of such a body as follows:

> Actuality is spoken of in two ways, first as knowledge is and second as contemplation is. It is clear then that *psuchē* is actuality as knowledge is; for both sleep and waking depend on the existence of *psuchē*, and waking is analogous to contemplation, and sleep to the possession but not the exercise of knowledge.
>
> (412a22–26)

If someone possesses knowledge of something, he or she can be said to have achieved some *state* (think of having acquired knowledge of a language, for example). But there is then a further actualization of that state, namely the *employment* of that knowledge

(for example, using one's knowledge of the language in some specific circumstance). In claiming that *psuchē* is a *first* actuality Aristotle means that it is analogous to knowledge, rather than analogous to exercising some knowledge. The animal is still alive when it sleeps, and so still possesses *psuchē* at that point. Hence waking must be a further actualization of the living creature—a second actuality of *psuchē*—and *psuchē* itself must be a first actuality—like knowledge—an actuality that is possessed by certain natural bodies, and owing to which living animals are able to be awake.

Now, if the soul *just is* a first actuality of a natural body which has organs, then palpably it cannot exist without such a body. (As we shall consider in §3, Aristotle will later qualify this: perhaps some parts of *psuchē* could be pure actualities, actualities of no specific body (*De an.* 2.1, 413a6–7), but certainly *psuchē* as specified in his general account is inseparable from the body of which it is an actualization.) Indeed, Aristotle notes that his account entails that "we should not ask whether the *psuchē* and the body are one, any more than whether the wax and the impression [in the wax] are one" (*De an.* 2.1, 412b6–7). But while *psuchē*, so specified, is clearly inseparable from a body of the requisite kind, one would naturally think that the reverse does not hold: bodies of the requisite kind could fail to possess *psuchē*. Most simply, when the animal dies, the body will exist (for a while at least) without "life" (for example, without the capacities of waking or sleeping), and this would seem to be a body of the requisite kind that has lost its *psuchē*. However, interestingly, Aristotle explicitly denies this: on his view, just as an axe that cannot cut is an axe in name only, and an eye painted on a statue is an eye in name only, so too a dead body is a body of the requisite kind in name only: "it is not that which has lost its *psuchē* which is potentially such as to live, but that which possesses it" (*De an.* 2.1, 412b25–26). On this account, just as the *psuchē* of a body is inseparable from the body of which the *psuchē* is the first actuality, so too bodies that count as being "potentially such as to live" or as "natural bodies with organs" are inseparable from the *psuchē* which is their first actuality. On this notion of "body," when an animal dies, its body ceases to exist no less than its *psuchē*.

Some commentators have found this account deeply problematic. Aristotle characterizes natural bodies in general as composites of form and matter, and claims that in the case of living things the soul is the form and the body is the matter (*De an.* 2.1, 412a6–21). (Hence Aristotle's account has been dubbed "hylomorphism," after *hulē*—matter, and *morphē*—form.). But it has been thought that the form–matter distinction only makes "ready sense" where the matter "can be picked out in such a way that it could be conceived as existing without that form" (Ackrill 1972–3: 126). This will typically occur with artifacts. A bronze sphere, for example, is bronze with a certain shape, but we can melt the bronze down and reshape it, and then the very same matter will take on a different form. And yet, as we have seen, in the case of the soul Aristotle holds that the matter is not contingently enformed. But then it seems that we can no longer make "ready sense" of the body as the matter that is enformed by the soul.

A number of responses have been offered on Aristotle's behalf. Some commentators (see, for example, Williams 1986, Cohen 1992) have distinguished between (i) a body—Aristotle's notion of "body" which is essentially alive, and (ii) a BODY—something that is contingently alive, and can survive death (at least for a while). This way, BODY can fill the matter slot for the form of the soul, just as bronze does in the case of the bronze sphere. Of course, the difficulty with this suggestion (as Williams acknowledges (1986: 193)) is that it is not really a defense of Aristotle against the above-mentioned problem but a reconstruction of what it is thought that he should

have said. Another response (see, for example, Shields 1993) is to maintain that the key to Aristotle's account is that he characterizes the matter of a human being *functionally*, as being able to perform the function of a certain kind or class (see *De an.* 2.1, 412a28–412b4), and then to point out that this holds of many artifacts as well. "Axe matter" will necessarily have the property of being able to chop wood, just as organic bodies are necessarily the bodies of living beings. (For another interesting response to the problem, see Frey 2007.)

Aristotle calls his account in *De anima* 2.1 the "most comprehensive definition" of *psuchē* (412a5–6), one that provides "something common to every *psuchē*" (412b4; although note the possibility of exceptions I have already mentioned: 413a6–7). He later concedes that in so far as his general account of *psuchē* will fit all kinds of *psuchē*, it will not be peculiar to any particular kind of *psuchē*, just as a definition of "figure" that would fit all types of figure (triangle, square, pentagon, etc.) would not be peculiar to any particular kind of figure (*De an.* 2.3, 414b20–25); and he claims that it would be foolish to neglect a series of definitions that will "correspond to the proper individual species" in favor of such a common definition that "will be specific to no actually existing thing" (414b25–28). This should not be taken to suggest that Aristotle thinks that the general account is uninformative or unimportant, but it does mean that we cannot rest with it and assume that the work has been done. In line with this observation, Aristotle proceeds in the remainder of *De anima* to offer accounts of nutrition (2.4), perception and the particular sense modalities (2.5–3.2), *phantasia* (3.3), thought (3.4–3.6), and the capacity for local movement (3.9–10). In addition, in the *Parva naturalia* (a series of short essays we find in the corpus after *De anima*), he provides a separate discussion of various sense-objects (*De sensu*), and accounts of, for example, memory (*De memoria*), sleep (*De somno*), and dreams (*De insomniis*). And again, in *De motu animalium*, he provides yet another important discussion of animal locomotion. There has been much discussion about all these components of Aristotle's account, and in this chapter I can do no more than indicate some of the debates that are on-going. I shall briefly consider a major dispute concerning Aristotle's general account of perception, and then provide a few illustrative remarks about *phantasia* and thought.

2 Perception

What happens when we perceive something? Aristotle claims that perception involves receiving a perceptible form without the matter:

> In general, with regard to all sense-perception (*aisthēsis*), we must take it that the sense (*aisthēsis*) is that which can receive perceptible forms without their matter, as wax receives the imprint of the ring without the iron or gold, and it takes the imprint which is of gold or bronze, but not *qua* gold or bronze.
>
> (*De an.* 2.12, 424a17–21)

But what does Aristotle mean? The *perceptible* form of *x* is not the form of *x*. The form of an animal is its *psuchē*, but in perceiving an animal one does not receive its *psuchē*. Rather, the perceptible form of *x* pertains to *x*'s sensory appearance. Consider opening one's eye in front of a red bus, one's eye shifts from not-seeing red to seeing red. But what does it mean to take on the perceptible form *without* the matter? This is clearly fundamental for understanding Aristotle's view but, somewhat notoriously in the

secondary literature, radically different answers have been defended. On one interpretation (whose most prominent proponent is Richard Sorabji: see his 1974, 1992, 2001), what happens is that the matter in the sense-organ changes so that it takes on the quality of the object perceived. On this view, which has been dubbed a "literalist" reading, when we see something red, like the red bus, the eye jelly (within the eye) literally takes on the quality of red. In maintaining that this involves taking on the perceptible form *without the matter*, Aristotle means, on this view, that the eye takes on the perceptible quality (red) of the sense-object without taking on the matter of the sense object (the bus!). (Likewise, the passage quoted above claims that if you imprint a signet ring into a piece of wax and take it out, the wax takes on the imprint without the iron or the gold.)

The most prominent alternative to this interpretation has been called a "spiritualist" reading (this reading has been vigorously defended by Myles Burnyeat, see his 1992, 1995, 2001, 2002, although Burnyeat insists the interpretation is not new but is present in various forms in the sixth century AD Greek commentator on Aristotle, John Philoponus, and in the great medieval philosopher, Thomas Aquinas). On this view, when a perceiver comes to perceive a sensible quality (for example, redness) no physical change occurs in the perceiver himself. All that happens is that the perceiver *becomes aware* of the sensible quality (for example, becomes aware of redness) without his sense organ changing physically. On this view, "taking on the form without the matter" means: "taking on the perceptible form without being affected materially (in any way)." Aristotle thinks that perception is a basic irreducible type of causal interaction with the world, one which does not involve any physiological change.

It is important to note that the spiritualist reading does not deny that Aristotle thinks that there are physical *conditions* for perception. Even on this view, the eye must be made of transparent eye jelly, there must be a transparent medium between one's eye and the object perceived, and one must of course open one's eyelid in order to see. But these are simply physical "enabling" conditions for perception. On the spiritualist view, although all these physiological conditions must be in place for perception to occur, no physiological *change* occurs as a result of the act of seeing. All that is required is that the perceptible form in question acts on our perceptive faculty.

The spiritualist reading has been thought to be supported by Aristotle's general account of perception in *De an.* 2.5. Aristotle here maintains that perception is not some kind of ordinary alteration. Ordinary alteration involves the "extinction of a contrary." This might happen, for example, if one learns a language: in shifting from not knowing French to knowing French, not-knowing-French has been "extinguished" and replaced by knowing-French. However, Aristotle insists that this sort of alteration does not occur in an act of perceiving. The parallel to ordinary alteration in this context occurs when one goes from not being a perceiver to being a perceiver, that is, when one is *born*. Actualizing an *existing* capacity to perceive (by, for example, opening one's eye) is instead equivalent to actualizing some knowledge one already has (as, for example, speaking a language), and not an alteration in the first sense. Indeed, Aristotle explicitly claims that actualizing an existing capacity to perceive is either not an alteration at all or at least only an alteration in a quite different sense (*De an.* 2.5, 417b6–7): it is not right, he points out, to claim that the knower is "altered" when he uses his knowledge, just as it is not right to claim that the builder is being altered when he builds (417b8–9). The spiritualist might argue that this shows that the literalist reading is wrong because the change that the literalist envisaged during perception was an alteration *in a perfectly normal sense*, namely, taking on the quality perceived, whereas on Aristotle's actual

view no such change takes place. (For a much fuller discussion of the above argument, see esp. Burnyeat 2002.)

Some commentators have resisted this reasoning. It has been suggested (Caston 2005: 266–267) that it relies on a false inference, moving from:

1. Perceiving is not an ordinary alteration

to:

2. Perceiving does not involve an ordinary alteration

or even to:

3. Perceiving does not involve any ordinary physical change.

In pointing out that perceiving is not an ordinary alteration, Aristotle might simply be signaling that perceiving does not involve the destruction of the capacity itself (in the way that not-knowing-French is "destroyed" when one has learnt French). Perceiving is instead analogous to using or employing one's knowledge; that is, it does not destroy the capacity, but in fact reinforces it. If this is Aristotle's point, he is not committed to either 2 or 3 above. Moreover, the building analogy he employs (*De an.* 2.5, 417b8–9) might actually be thought *to support* the idea that he thinks that a physical change does occur in perception (as Caston argues (2005: 267–268)). Aristotle asserts that when the builder starts building, *he* does not undergo any alteration. But even though the builder is not altering (which would be analogous to perceiving involving the destruction of the capacity), it is still the case that *material changes* must occur while the builder builds. The builder cannot build if he just stands there with his arms folded. So too, although perception is not itself an alteration, in the sense specified, this does not mean that there are not any necessary physiological changes which must take place when perception occurs. Indeed, so far as the argument goes, those changes could be just the ones that the literalist posited. (For another response to Burnyeat's reading of *De an.* 2.5, see Heinaman 2007, and for a recent discussion of what Aristotle intends by different kinds of "alteration" in *De an.* 2.5, see Bowin 2011.)

It sometimes seems to be assumed that *either* the literalist is right *or* the spiritualist is, and that there is no other possible reading (see, for example, Burnyeat 1992: 15; 2002: 81–83). But this too has been resisted (see esp., Caston 2005). The literalist insists that the physical change that accompanies perception is not just *any* change—it is the very specific change of taking on *the exact same perceptual predicate* (e.g. red) that applies to the perceptible quality. Equally, the spiritualist interpretation not only rejects this, but much more: it rejects the idea that *any* physiological alteration of whatever kind takes place in perception. It has rightly been pointed out that this leaves conceptual space for intermediate positions that claim that *some* physical alteration occurs, but not the very specific one that the literalist posits (Caston 2005). Given this possibility, one may then attempt to defend an interpretation of Aristotle that falls between the two extremes. For instance, Aristotle claims (*De an.* 2.5, 418a3–6; see also 417a20) that that which can perceive is "potentially like" what the perceived object is actually: at the beginning of the process the two are dissimilar, whereas at the end of the process that which can perceive "becomes like it and is such as it is." It could be that in making such claims Aristotle only means that the sense-organ *becomes similar* to the thing perceived, not, as literalist thinks (see Sorabji 1992: 212), that it takes on the exact same quality.

Talk of assimilation does not entail total similarity. What then *would it* mean? One idea might be that in perception the matter of the sense organs comes to share the same *proportions* that the perceptible quality exhibits (proportions that are realized in different contraries), without necessarily replicating the perceptible quality itself (Caston 2005: 247, and for further development of the view, see 299–315). At any rate, it seems reasonable to take seriously the idea that there may be more interpretative options than merely: literalist or spiritualist.

3 *Phantasia* and thought

Another capacity that Aristotle discusses, *phantasia* (pl. *phantasiai*), has proved hard to find an adequate translation for ("imagination," "appearance" and "representation" have been employed), and I see no harm in introducing it as a technical term. In his canonical discussion of this capacity, in *De anima* 3.3, Aristotle characterizes *phantasia* as "a movement taking place as a result of actual sense-perception" (429a1–2), and claims that because "they [viz. *phantasiai*] persist and are similar to perceptions, animals do many things in accordance with them, some because they lack reason, viz. beasts, and others because their reason is sometimes obscured by passion, disease, or sleep, viz. men" (429a4–8). Clearly, Aristotle thinks that *phantasiai* are dependent on and derived from perceptual encounters in some way, and can be central in bringing about certain cases of animal action. But exactly what the capacity amounts to is a matter of dispute, and I will not be able to resolve the dispute here.

On one influential reading (Schofield 1978), Aristotle is attempting to characterize a capacity for "non-paradigmatic sensory experiences,"

> experiences so diverse as dreams and the interpreting of indistinct or puzzling sense data, which may be held to resemble the paradigm of successful sense perception in one way or another, yet patently lack one or more of its central features, and so give rise to the skeptical, cautious or non-committal *phainetai* ["it appears"].
>
> (Schofield 1978: 101–102)

This account fits well with Aristotle's claim that it is not when we are exercising our senses accurately with regard to objects of perception that we say that this appears (*phainetai*) to us to be a man, but rather when we do not perceive it distinctly (3.3, 428a12–15). But it fits rather less well (as Schofield himself concedes: 1978: 114–115) with Aristotle's claim that *phantasia* of special perceptibles (for example, color or sound) is true just so long as we have perception of the perceptible in question (428b25–28). For, given this account, *phantasia* should not really arise when perception is functioning normally.

On another influential account (Nussbaum 1978: essay 5), *phantasia* is a very general interpretative capacity, an ability to see things *as* something, a capacity that presents perceived or thought objects to a creature in such a way that it can be moved to act. Support for such an account has been thought to lie in Aristotle's claim in *De motu animalium* that in action "the affections suitably prepare the organic parts, desire the affections, and *phantasia* the desire; and *phantasia* comes about either through thought or through sense perception" (8, 702a17–19). However, in other places in *De motu* (6, 700b17–18, 7.701a32–33) Aristotle claims that action can be prompted either by perception, *phantasia*, or thought, and so does not appear to single out *phantasia* as having

some central role (for an argument that he does not intend to do so in 702a17–19 either, see Schofield 2011).

The fact that in *De motu* Aristotle juxtaposes perception, *phantasia*, and thought as distinct sources of cognitive or discriminative information undermines yet another view—that *phantasia* is not a cognitive capacity in its own right, but a capacity for representation which (sub-)serves other genuine capacities (see Wedin 1988: ch. 2; and for criticism, for example, Schofield 2011: 123–124). Although it is clear that Aristotle thinks that *phantasia* plays a key role in the explanation of other psychological capacities (for example, thought, memory, dreams, emotions), this does not mean that it ceases to exist as a capacity in its own right.

If imposing a consistent interpretation on everything Aristotle writes about *phantasia* has proved recalcitrant, the situation is arguably worse with respect to his account of thought. Very little in the interpretation of Aristotle's account of this capacity has received universal acceptance, from antiquity to the present day. Thus, even the minimal amount I shall now sketch should not be taken to be uncontroversial.

At the beginning of *De an.* 3.4 (429a10–18) Aristotle draws an analogy between thought and perception. If thought is like perception, then just as a sense is affected by a perceptible object, so too thought is affected by a thinkable object. Thus we have "intelligible forms" analogous to the "perceptible forms" mentioned earlier (see §2 above). However, this is where the parallel with perception stops; for Aristotle next (429a18–29) argues as follows:

> (i) the intellect (*nous*) thinks all things (that is, is capable of thinking about anything?);
> (ii) the intrusion of anything foreign to the intellect would hinder and obstruct it;
> so (iii) the intellect must be "unmixed";
> hence also (iv) the intellect must have no other nature than this: that it is potential;
> so (v) the part of the soul in virtue of which the soul thinks is actually none of existing things before it thinks (see also: "the intellect is in a way potentially the objects of thought, although it is actually nothing before it thinks; potentially in the same way as there is writing on a tablet on which nothing actually written exists" (429b30–430a2));
> equally, since (vi) the intellect does not come to be of a certain specific kind (for example, hot or cold), or have an organ;
> it is also reasonable that (vii) the intellect should not be mixed with the body.

There is much that is intriguing about this argument, and it has received much discussion (recent treatments are provided by Sisko 1999, Caston 2000, and Politis 2001), but here I shall just pick up on the idea that the intellect is not mixed with the body. This might seem to resonate with a point from *De an.* 2.1. After providing his general account of his hylomorphism, Aristotle wrote:

> That, therefore, the *psuchē* or certain parts of it, if it is divisible, cannot be separated from the body is quite clear; for in some cases the actuality is of the

> parts themselves. Not that anything prevents at any rate *some* parts from being separable, because of their being actualities of no body.
>
> (413a3–7)

If thought is not an actuality of some specific body, but just an actualization of a pure potentiality, then it seems that it could (in principle) be separable. Indeed, in discussing the putative separability (whether spatially or only "in account") of capacities of the soul in *De an.* 2.2, Aristotle claimed that although the situation was not at that point clear about the intellect and the potentiality for contemplation, it nonetheless "seems to be a different kind of soul" which "alone can exist separately, as the everlasting can from the perishable" (413b24–27).

However, elsewhere Aristotle entertains a different possibility. In *De an.* 1.1, after claiming that in most cases the soul is neither affected nor acts apart from the body, he adds:

> Thinking looks most like being peculiar to the soul. But if this too is a form of *phantasia* or does not exist apart from *phantasia*, it would not be possible even for this to exist apart from the body.
>
> (403a8–10)

And yet Aristotle goes on to assert precisely this—that thought cannot take place without *phantasia*—on a number of separate occasions (for example, *De an.* 3.7, 431a14–17, 3.8, 432a3–14, *Mem.* 1, 449b30–450a5. (The reason seems to be that the thinking capacity thinks intelligible forms 'in' *phantasmata* [contents of *phantasiai*]: *De an.* 3.7 431b2.) Thus since *phantasia* requires a body, that is, in so far as it is dependent on perception, and since thought is in turn dependent on *phantasia*, thought too would seem to require a body (which in turn would appear to make thought also parasitic or dependent on perception in some way, on which see *De an.* 3.8, 432a3–14).

In fact, Aristotle seems to want to hold *both* that human thought requires a body *and also* that the intellect is something unmixed and unaffected. In *De an.* 1.4 he writes:

> Thought and contemplation decay [sc. when humans get old] because something else within is destroyed, while thought is in itself unaffected. But thinking and loving or hating are not affections of that, but of the individual thing which has it, in so far as it does. Hence when this too is destroyed we neither remember nor love; for these did not belong to that, but to the composite thing which has perished. But the intellect is surely something more divine and is unaffected.
>
> (408b24–29)

Human thinking is an affection of the composite human being, and so decays as the body decays and is destroyed when the body is destroyed. But, it seems, the intellect itself, on Aristotle's view, is not dependent on the body and so is unaffected by the body's material decay or destruction.

In *De an.* 3.5, an infamously short and disputed chapter, Aristotle identifies two kinds of intellect. First, a kind of intellect that becomes all things (that is, is capable of thinking about anything?) (430a14–15)—this may be the intellect he was discussing in *De an.* 3.4. Second, a kind of productive intellect that is not such as to be able *to be* all

things, but such as *to make* or *create* all things (430a15). Aristotle states that the latter is a kind of positive state, like light; it is "distinct, unaffected, and unmixed, being in essence activity" (430a17–18) and "in separation it is just what it is, and this alone is immortal and eternal" (430a22–23). What this intellect amounts to is mysterious and contested. Here are two rival interpretations. (1) The active intellect is a part of the human soul, but a part that—though immortal—would not provide any meaningful notion of personal immortality since it is just the necessary condition for the intelligibility of intelligible forms. (2) The active intellect is god. On this interpretation, it is god's activity—which is thinking itself—which is responsible for the intelligibility of all intelligible forms. It is a necessary condition of our thinking, just as light is a necessary condition of our seeing. (See, for example, Gerson (2004) for a recent discussion of the dispute.)

4 Aristotle and the mind–body problem: is Aristotle's view "credible"?

A debate has raged in the secondary literature concerning whether or not Aristotle has a defensible position in the philosophy of mind. Some have thought that he might, in so far as his account is proto-functionalist (see, for example, Putnam 1975, Shields 1990, Nussbaum and Putnam 1992, Wilkes 1992). Others, by contrast, have thought that he might, precisely because his account is *not* proto-functionalist, but is instead *sui generis*, challenging all current positions in the philosophy of mind (see esp. Charles 2009, 2011). Still others have thought that Aristotle's account is "incredible" and not one that we post-Cartesian philosophers can take seriously (see esp. Burnyeat 1992). (Again, for an argument that, all things considered, Aristotle's view is best characterized as dualist, see Heinaman 1990.) Clearly, in a few paragraphs I am not going to be able to resolve this dispute, ranging as it does over a wide assortment of texts and technical points from both contemporary philosophy of mind and Aristotle scholarship. Nevertheless, I would like to emphasize a key point that may help refocus the debate somewhat.

The view that Aristotle's view is incredible, and can no longer be seriously entertained by us was famously argued for by Myles Burnyeat (1992). Burnyeat wrote his paper in response to the claim that was becoming popular at the time that Aristotle's position in the philosophy of mind was functionalist (see above for some references). It was suggested, by, for example, Nussbaum and Putnam, that Aristotle sought to escape the reductive materialism of Democritus, on the one hand, and the dualism of Plato, on the other, and in so doing ended up with some kind of functionalist "middle route" (similar to the functionalist middle route that Putnam 1975 himself proposed between dualism and materialism). Given this background, Burnyeat calls the functionalist reading "the Putnam–Nussbaum thesis" and, near the beginning of his paper, writes:

> I propose to argue that the Putnam–Nussbaum thesis is false, and that its falsehood is of more than historical interest. The thesis fails as an interpretation of Aristotle because it fails to notice that Aristotle's conception of the material or physical side of the soul–body relation is one which no modern functionalist could share; no modern functionalist could share it because no modern philosopher, whatever his persuasions, could share it [...] Aristotle's philosophy of mind is no longer credible because Aristotelian physics is no longer credible.
>
> (1992: 16)

How does Burnyeat propose to argue for his view? He continues:

> The context in which I will examine the Putnam–Nussbaum thesis […] is the theory of perception. This will involve us in a struggle to understand one of the most mysterious of Aristotelian doctrines, the doctrine that in perception the sense-organ takes on the sensible form without its matter. I choose this context precisely because it is so difficult to understand. I think it is difficult to understand what Aristotle says about perception because it is difficult for us to believe it.
>
> (1992: 16)

One might have thought that the *difficulty* of understanding Aristotle's account of perception would be a *very bad* reason to assess the truth of the Putnam–Nussbaum thesis in that sphere: if it is so difficult to understand Aristotle's account of perception, then why not take a simpler psuchic state to assess the truth of the thesis? At any rate, Burnyeat then goes on to argue for the spiritualist reading of Aristotle's account of perception, according to which perception involves no material change at all. On this interpretation, as we have seen, taking on the perceptible form without the matter, involves, for example, the eye taking on the perceptible form of the object (seeing red) without it undergoing any material change in the process.

Now in one respect it might be thought that the spiritualist reading would commit Aristotle to something less bizarre than the rival literalist reading. For, on the spiritualist interpretation, the eye does not actually have to turn red when one sees something red, whereas the literalist reading has this seemingly implausible consequence. But in fact it is the spiritualist reading that is more bizarre philosophically, at least for us. This is because, on this account, there simply are no physical facts that correspond to the *process* of perception. The physical *conditions* that the spiritualist allows are only weak enabling conditions. There is nothing that amounts to a physiological change that occurs *when we perceive*. By contrast, on the literalist reading, we can say that although Aristotle's account of what actually happens at the physiological level is false, it at least remains true that for each perceptual change there must be some accompanying physical change. This would mean that Aristotle's general picture of perception would be consistent with functionalism or materialism, whereas on the spiritualist reading it would not, since on that view the psychological act of any particular perceiving does not supervene on the physical at all. This, Burnyeat points out, is something that we simply cannot believe today, whether we are functionalists, materialists or even dualists. As one commentator put it, for us to believe this would be like believing new age spiritualists in holding that crystals have certain powers, for example, quartz to bring clarity or amethyst creativity (Caston 2005: 263). We simply cannot follow such views and at the same time endorse modern science. Hence, given that Burnyeat thought that he had established the spiritualist reading as the correct one, he concluded with the laconic quip: "new functionalist minds do not fit into old Aristotelian bodies" (1992: 26).

Now clearly Burnyeat's view about the philosophical merits of Aristotle's account hinges on the truth of the spiritualist reading he is advocating. But at this point I am not concerned with the merits of that reading (see §2 above), but in Burnyeat's more general argumentative strategy. His reasoning seems to be:

> (i) Aristotle's account of perception is incompatible with the functionalist reading;
> So (ii) the functionalist reading of Aristotle is wrong.

My problem with this is that, even putting to one side issues about the truth of the first premise, the inference from (i) to (ii) surely relies on the suppressed premise that the account of the physical side of things that Burnyeat attributes to Aristotle's account of perception would apply *equally well across all psuchic states*. Otherwise, it would seem that we could say that even if Burnyeat is right about perception, Aristotle might nonetheless hold a functionalist account of some other psuchic states, and might have a general account of how this works that could be investigated. Given that Burnyeat has not shown (nor even attempted to show) that his account applies to all the other psuchic states that Aristotle discusses, his general claim is unwarranted.

To see this, consider again Aristotle's account of thought. On one reading (see, for example, Caston 2000), Aristotle holds that whenever we understand something, we must not only be in some bodily state or other, we must be in a particular type of bodily state, one that possesses certain characteristics corresponding in relevant ways to the content understood (this stems from the link between thought and *phantasia*). Thus Aristotle's view is compatible with the supervenience of acts of the intellect at least on the body as a whole. On this view, to say that the intellect is not compounded with the body must therefore be compatible with its being the ability of a certain kind of complex body, with the functioning of the former depending on the functioning of the latter. The intellect differs from other abilities just in so far as it lacks a dedicated organ; it is rather something that a human being as a whole possesses. On another reading (see Gerson 2004), intellect, for Aristotle, is something separable and immortal. On this view, intellect is always engaged in self-reflective activity, both when it is "in" the human soul and also when it is separated from it (2004: 365). Thus the intellect can be genuinely separated from the body, and hence its activities could not supervene on states of the body. For my current purposes, which view is right (or whether they can be brought closer together in line with my discussion in §3) is not important. The point is simply this: however we resolve the dispute, we clearly cannot expect to do so by examining Aristotle's account of perception. In order to work out whether Aristotle's account of the intellect is consistent with materialism or functionalism we must look at the specific details of that account.

I may seem to be suggesting that Aristotle's position on the mind–body question must be ascertained piecemeal, psuchic state by psuchic state. But in fact the situation is not as uncertain as this may suggest. There is strong evidence that Aristotle's account of a good range of mental states *is* compatible with materialism/functionalism, even if this remains doubtful for his accounts of perception and thought. The evidence in question appears in the very first chapter of *De anima*. Aristotle here considers (*inter alia*) whether the properties of *psuchē* are all common to the body as well, or whether there are any that are peculiar to the soul itself ("it is necessary to deal with this," he notes, "although it is not easy" (403a5)). He then claims:

> It appears that in most cases the *psuchē* is not affected nor does it act apart from the body, for example, in being angry, being confident, wanting, and perceiving in general.
>
> (403a5–7)

(He then goes on to consider whether thought is an exception, in the passage we quoted in §3.) Now this passage does not itself undermine the spiritualist reading because even on that account perceiving does not occur *without* a body: as we have mentioned, the

spiritualist interpretation accepts that there are certain physical "standing conditions" that must be in place if perception is to occur; for example, the eye must be healthy, there must be a transparent medium, it cannot be dark, and so on. Since Aristotle only seems to claim that the psychological states mentioned do not occur "apart" from the body, the passage is clearly consistent with the spiritualist reading. However, a few lines later, Aristotle writes:

> It seems that all the affections of the *psuchē* involve the body—passion, gentleness, fear, pity, confidence, and, further, joy and both loving and hating; for at the same time as these [occur] the body is affected in a certain way.
>
> (403a16–19)

At the same time as each of these affections occurs, the body too is affected, that is, it seems, *changed* or *altered*, in some specific way. This would look to be about as clear a statement as one could want of the view that when we undergo such states, there must also be some accompanying physical change. In that case, we can say that *for at least this range of states* there is nothing "incredible" about Aristotle's view, and nothing a priori that requires that his whole account be "junked" (as Burnyeat put it: 1992: 26). Now, in a later paper, Burnyeat makes a good deal of the fact that *perception* no longer appears on the second list. It is on the first list, he claims, because it does indeed require a body, but it has dropped off the second list because it is not one of the states that require an accompanying physical change. Other commentators have thought this unlikely (see Caston 2005: 281–285). But, on either view, Aristotle maintains that for at least *a central set of states*—such as anger, fear, pity, confidence, loving and hating—arousal of the state requires a concomitant physical change. If Burnyeat concedes this much, as it seems he now does, he has conceded that a functionalist reading, or any broadly materialist reading, is consistent with Aristotle's account of a broad range of psuchic states.

This means that it is open for us to ask whether Aristotle's account of these states is plausible or not, whether it is functionalist or not, and how it relates to modern conceptions of mind. When that account is reconstructed, perhaps we shall have to concede that Aristotle himself did not apply it to perception, or to thought. That is a matter of continued debate. Nonetheless he has an account of some states that is comparable to other post-Cartesian theories of the mind–body relation. So Burnyeat's original attack threw the baby out with the bath water. We can still sensibly ask how we should characterize Aristotle's account of these states with respect to the mind–body problem, and we can do so without worrying about Burnyeat's charge of incredibility.

References and further reading

This chapter has focused on Aristotle's *De anima* ("On the Soul"), the most important text for understanding Aristotle's psychology. This needs to be supplemented with the short texts in Aristotle's *Parva Naturalia*, especially *De sensu* ("On Sense"), *De memoria* ("On Memory"), *De somno* ("On Sleep") and *De insomniis* ("On Dreams"). Aristotle's account of animal locomotion in *De an.* 3.9–10 (not considered here) should be supplemented with *De motu animalium* ("On the Movement of Animals").

There is an enormous amount written on Aristotle's psychology. A good starting point for further reflection is the following collection of essays on *De anima*:

M. Nussbaum and A. Rorty, *Essays on Aristotle's De Anima*, Clarendon, orig. 1992, but the 1997 paperback reprint contains an additional article by Burnyeat.

Additional bibliography can be found in Chris Shields' excellent *SEP* article "Aristotle's Psychology," available at http://plato.stanford.edu/entries/aristotle-psychology/.

Ackrill, J. L. (1972–3) "Aristotle's Definitions of *psuchē*", *Proceedings of the Aristotelian Society* 73: 119–133.
Bowin, J. (2011) "Aristotle on the Various Types of Alteration in *De Anima* 2.5", *Phronesis* 56: 138–161.
Burnyeat, M. F. (1992) "Is an Aristotelian Philosophy of Mind Still Credible? (A Draft)" in M. Nussbaum and A. Rorty (eds.) *Essays on Aristotle's* De Anima, Oxford: Clarendon Press: 15–26.
Burnyeat, M. F. (1995) "How Much Happens When Aristotle Sees Red and Hears Middle C? Remarks on *De Anima* 2. 7–8", in M. Nussbaum and A. Rorty (eds.) *Essays on Aristotle's* De Anima (additional essay in 1995 edition), Oxford: Clarendon Press: 421–34.
Burnyeat, M. F. (2001) "Aquinas on 'Spiritual Change' in Perception", in D. Perler (ed.) *Ancient and Medieval Theories of Intentionality*, Leiden: Brill: 129–154.
Burnyeat, M. F. (2002) "*De Anima* II 5", *Phronesis* 47: 28–90.
Caston, V. (2000) "Aristotle's Argument for Why the Understanding Is Not Compounded with the Body", *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 16: 135–75.
Caston, V. (2005) "The Spirit and the Letter: Aristotle on Perception", in R. Salles (ed.), *Metaphysics, Soul, and Ethics in Ancient Thought*, Oxford: Oxford University Press: 245–320.
Charles D. (2009) "Aristotle's Psychological Theory", *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 21: 213–231.
Charles, D. (2011) "Desire in Action: Aristotle's Move", in M. Pakaluk and G. Pearson (eds.) *Moral Psychology and Human Action in Aristotle*, Oxford: Oxford University Press: 75–93.
Cohen, S. M. (1992) "Hylomorphism and Functionalism", in M. Nussbaum and A. Rorty (eds.) *Essays on Aristotle's* De Anima, Oxford: Clarendon Press: 57–73.
Frey, C. (2007) "Organic Unity and the Matter of Man", *Oxford Studies in Ancient Philosophy* 32: 167–204.
Gerson, L. P. (2004) "The Unity of Intellect in Aristotle's *De Anima*", *Phronesis* 49: 348–373.
Hamlyn, D. W. (1993) *Aristotle De Anima Books II and III (with passages from book I)*, with a report on recent work and a revised bibliography by Christopher Shields, Oxford: Clarendon Press (revised edition of the 1968 original).
Heinaman, R. (1990) "Aristotle and the Mind–Body Problem", *Phronesis* 35: 83–102.
Heinaman, R. (2007) "Actuality, Potentiality and *De Anima* II.5", *Phronesis* 52: 139–187.
Murphy, D. (2005) "Aristotle on why Plants Cannot Perceive", *Oxford Studies in Ancient Philosophy* 29: 295–339.
Nussbaum, M. (1978) *Aristotle's De Motu Animalium* (text with translation, commentary and interpretive essays), Princeton, NJ: Princeton University Press.
Nussbaum, M. and Putnam, H. (1992) "Changing Aristotle's Mind", in M. Nussbaum and A. Rorty (eds.), *Essays on Aristotle's* De Anima, Oxford: Clarendon Press: 27–56.
Politis, V. (2001) "Aristotle's Account of the Intellect as Pure Capacity", *Ancient Philosophy* 21: 375–402.
Putnam, H. (1975) "Philosophy and Our Mental Life", in his *Mind, Language, and Reality*, Cambridge: Cambridge University Press: 291–303.
Schofield, M. (1978) "Aristotle on the Imagination", in G. E. R. Lloyd and G. E. L. Owen (eds.) *Aristotle on Mind and the Senses*, Cambridge: Cambridge University Press: 99–141.
Schofield, M. (2011) "*Phantasia* in *De Motu Animalium*", in M. Pakaluk and G. Pearson (eds.), *Moral Psychology and Human Action in Aristotle*, Oxford: Oxford University Press: 119–134.
Shields, C. (1990) "The First Functionalist", in J.-C. Smith (ed.) *Essays on the Historical Foundations of Cognitive Science*, Dordrecht: Kluwer Academic Publishers: 19–33.
Shields, C. (1993) "The Homonymy of the Body in Aristotle", *Archive für Geschiche der Philosophie* 75: 1–30.
Sisko, J. (1999) "On Separating the Intellect from the Body: Aristotle's *De Anima* iii.4, 429a20–b5", *Archiv für Geschichte der Philosophie* 81: 249–67.
Sorabji, R. (1974) "Body and Soul in Aristotle", *Philosophy* 29: 63–89.
Sorabji, R. (1992) "Intentionality and Physiological Processes", in M. Nussbaum and A. Rorty (eds.), *Essays on Aristotle's* De Anima, Oxford: Clarendon Press: 195–225.
Sorabji, R. (2001) "Aristotle on Sensory Processes and Intentionality: A Reply to Burnyeat", in Dominik Perler (ed.), *Ancient and Medieval Theories of Intentionality* (= Studien und Texte zur Geistesgeschichte des Mittelalters, Bd 76.), Leiden: Brill: 49–61.
Wedin, M. (1988) *Mind and Imagination in Aristotle*, New Haven, CT: Yale University Press.
Wilkes, K. (1992) "*Psuchē* versus the Mind", in M. Nussbaum and A. Rorty (eds.), *Essays on Aristotle's* De Anima, Oxford: Clarendon Press: 109–127.
Williams, B. (1986) "Hylomorphism", *Oxford Studies in Ancient Philosophy* 4: 189–199.

Related chapters

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20. Understanding, knowledge, and inquiry in Aristotle
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22
ARISTOTLE'S PHILOSOPHY OF NATURE

Andrea Falcon

Introduction

The Presocratic study of nature had a distinctively narrative character. It did not simply state and explain why the natural world is the way it is; it narrated how the natural world in its present order came into existence. In other words, this study took the form of a cosmogony. The narrative method was accepted by Plato. In the *Timaeus* Plato offers his account of the emergence of the visible world in a cosmogonic framework. This does not necessarily mean that the cosmogony offered in the *Timaeus* is to be taken literally. It is telling that from very early on the *Timaeus* was subject to literal as well as non-literal interpretations. By accepting the narrative method, Plato placed himself in continuity with a tradition that goes back, ultimately, to early Greek philosophy. Aristotle certainly owed a great deal to this tradition. In the first book of the *Physics*, Aristotle makes an obvious effort to establish contact with it. Continuity with the previous tradition of natural investigation is routinely emphasized, especially by scholars who have tried to place Aristotle's physics in the context of ancient Greek physics. Perhaps Friedrich Solmsen is the most illustrious example of this exegetical approach. In *Aristotle's System of the Physical World*, he argues that a full appreciation of Aristotle's physics requires an examination of Presocratic as well as Platonic physics. Solmsen states the main thesis of the book as follows:

> On a new level, with different methods and different intellectual equipment, the inquiry of the physicists is carried on. Aristotle did not discover the subject with which he deals in his physical treatises. In the questions which he takes up he is neither as free nor as arbitrary as some students of his thought appear to believe, and in the answers which he provides he is not as invariably original as he himself in the course of his arguments may lead us to think. (vii)

Without denying Aristotle's profound and continuing debt to Plato and the Presocratic tradition, the following pages will stress that there is an important element of discontinuity which is rarely discussed in the secondary literature (Menn 2006: 271–275 is a notable exception). Aristotle does not endorse the traditional narrative method. It is

tempting to explain this change in light of Aristotle's commitment to the eternity of the natural world. Strictly speaking, there cannot be a cosmogony if the cosmos has always existed. But Aristotle does not only set aside the question of the origin of the world; he also replaces the narrative method with a non-narrative sequence. A closer look at this sequence indicates that the reason for this replacement has to do with Aristotle's explanatory project and the special place that the *Physics* enjoys within this project.

Aristotle's natural philosophy in outline

We can usefully think of the *Physics* as providing the first principles—that is, the explanatory starting points (*archai*)—which the student of nature must employ in order to explain the natural world. In order to see this, it will be useful to take *Physics* 2 as a case study. *Physics* 2 is a relatively independent and self-contained discussion devoted to developing what Aristotle considers an adequate conception of nature (*physis*). Aristotle famously begins by stating that nature is some internal source of change (*kinēsis*). He argues that both the matter of a natural thing and its form have a claim to be called its nature. The close connection that Aristotle establishes between nature and change is transmitted to matter and form. Matter is not only the material out of which a natural thing is made; it is also the subject that has the potential to undergo some change. Form, too, is linked to change. It is the arrangement or shape to be found in what is actual at the end of the process of change (*Physics* 2.1). The view that natural objects are composites of matter and form is known as hylomorphism. Hylomorphism is an Aristotelian innovation. It entails a significant revision of all prior natural investigations, which emphasized the importance of *either* matter *or* form. By contrast, Aristotle argues that *both* matter *and* form are involved as *causes* in the explanation of natural objects. Therefore *both* matter *and* form are to be studied (up to a point) by the natural philosopher (*Physics* 2.2). It is precisely because the study of nature is a search for the relevant causes that a firm grasp of what a cause is, and how many types of causes there are, is imperative for a successful investigation of the natural world. In *Physics* 2, Aristotle provides the student of nature with the most elaborate presentation of his theory of the four causes (*Physics* 2.3). This theory is best understood as background knowledge that the student of nature must have mastered and must use in the actual study of the natural world. According to this theory, there are four types of causes. They are called (although not by Aristotle) the material cause, the formal cause, the efficient cause, and the final cause. This does not mean that every explanation has to invoke nature as a final, formal, efficient, and material cause. Rather, it means that, for a wide range of cases, failure to invoke nature as a formal, final, efficient, and material cause amounts to failure to provide an adequate explanation. In antiquity (as today), the final cause was the most controversial among the four causes. The need to posit ends or goals in the explanation of natural phenomena (what we call natural teleology) was not universally accepted. Hence, Aristotle has to engage in a defense of the final cause as a distinct and irreducible mode of causality (*Physics* 2.8). His defense is clearly looking forward to the study of life as presented in his biological works. Once final causality is defended, Aristotle makes a step further by focusing on the role that necessity plays in the study of nature. *Physics* 2.9 is entirely devoted to the introduction of the concept of hypothetical necessity. In this chapter matter is reconfigured as that which is necessary on the condition (on the hypothesis) that a goal is to obtain. If we keep in mind that Aristotle has argued that goal and form often coincide, and that they are formally the same as that

which produces the change, we will see that Aristotle concludes *Physics* 2 by relating matter and form as that which is for an end and the end for which. This conclusion does not simply bring us back to the initial claim that the study of nature is concerned with both matter and form; it provides us with clear instruction regarding how to study matter and form. While Aristotle reiterates the explanatory relevance of both matter and form, he emphasizes the explanatory dependence of matter upon a specific form. It is in light of the explanatory priority of form over matter that we can fully appreciate how Aristotle can say, in *Physics* 2.2, that the better claim for being a thing's nature belongs to its form and not to its matter.

There is more to the eight books of the *Physics* than an inquiry into the first principles of natural philosophy. The *Physics* also contains a treatment of change at the most general level. Again, we can see how this works by briefly looking at the discussion offered in *Physics* 8. This book is a good example of what might be called Aristotle's general study of change. The opening lines of *Physics* 8 announce an attempt to answer the question whether there is a beginning or an end to change. The need to address this question emerges from the way Aristotle conceives of natural philosophy. Natural philosophy is the study of things that are subject to change. In light of this conception, the question whether change has a beginning or an end is perfectly appropriate. In answering it, Aristotle establishes (among other things) that every chain of change must end with self-change, which is analyzed by Aristotle into a changer and something that is changed. Moreover, Aristotle argues that the first changer, which is causally responsible for the motion of the heavens, must be absolutely unchanged. At least two features of this argument are noteworthy. First, the details of celestial physics are systematically left out of *Physics* 8. Aristotle is content with arguing that the motion of the heavens is a single, continuous motion and showing how this motion fits as a causal intermediary in the chain of change. There is no reference in *Physics* 8 to the highly controversial claim that the heavens are made of a special simple body. The question of what kind of body is needed to account for the motion of the heavens is carefully avoided. It is tempting to think that this question is consciously postponed, as Aristotle has a great deal to say on this topic in the first book of the *De caelo*. Second, Aristotle is remarkably selective in his discussion of first unchanged changer. If one looks at what he says on this topic in *Physics* 8, one quickly realizes that there is not much of positive description of this principle. It is remarkable that Aristotle does not even refer to it as god. Such a silence may be taken as evidence that Aristotle's practice in natural philosophy is not as relaxed as is often thought. On the contrary, it reflects a firm grasp of the boundaries of natural philosophy and a keen interest in enforcing a division of labor between natural philosophy and first philosophy. *Physics* 8 is often seen as a bridge between natural philosophy and first philosophy. In reality, Aristotle shows no inclination to build such a bridge. He is very careful not to step into first philosophy. The first unchanged changer, which is also known as first unmoved mover, is a principle of natural philosophy because an adequate explanation of change can be attained only by appealing to it. In this sense, it is a principle of nature. But its study goes emphatically beyond the boundaries of natural philosophy. In the *Metaphysics*, Aristotle makes this point by saying that natural philosophy is wisdom but not the highest form of wisdom (*Metaph.* Γ.3, 1005b1–2). The question of how precisely Aristotle negotiates the boundaries between natural philosophy and first philosophy may be left aside. What is immediately relevant is that he explicitly recognizes that there is another philosophy beyond and above natural philosophy, as the natural world is not the totality of what there is. As a result of this, Aristotle takes

natural philosophy to be an investigation that is concerned with a specific department of reality.

The eight books of the *Physics* are the first installment of an extraordinarily ambitious project of investigation. They are followed by a detailed study of the natural world in all its parts. At least three points can be made in connection with this detailed study. First, the relevance that Aristotle gives to the study of life (what is often called, although not by Aristotle, biology) is unparalleled in antiquity. Second, the different parts of the natural world, including the study of life, are studied in a number of relatively independent investigations. Third, it is abundantly clear that the integration of these investigations is viewed by Aristotle as an essential part of the job of the student of nature. In other words, philosophy of nature, as it is understood by Aristotle, is *both* a unified *and* a distinctly organized body of knowledge. The opening lines of the *Meteorology* give a glimpse of how Aristotle conceived of its internal organization:

> We have already discussed the first causes of nature and all natural change, also the stars ordered in the motion of the heaven, and the bodily elements, their number, nature, and mutual transformation, and generation and perishing in general. There remains for consideration a part of this investigation which all the predecessors called meteorology [*meteōrologia*]. It is concerned with events that are natural, though their order is less perfect than that of the first element of bodies. They take place in the region nearest to the motion of the stars, such as the Milky Way, the comets, and the inflamed and moving portents. It studies also all the affections we may call common to air and water, and the kind and parts of the earth and the affections of its parts. These shed light on the causes of winds and earthquakes and all the consequences the motions of these kinds and parts involve. Some of these things puzzle us while others admit of explanation in some degree. Furthermore, the inquiry is concerned with the falling of thunderbolts and with whirlwinds and fire-winds, and further, the recurrent affections produced in these same bodies by concretion. Once we will have dealt with these things, we will consider whether we are somehow able to give, in accordance with the method indicated, an account of animals and plants, both in general and separately. Once this is discussed, perhaps the whole of what we established at the outset will be completed.
>
> (*Mete.* 1.1, 338a20–339a10)

We have to be careful not to read too much into this passage. Aristotle is content to give us an outline of his explanatory project. By definition, an outline does not contain all the information we may might want (or even need). The outline given in the opening lines of the *Meteorology* is no exception to the rule. It is not meant to give us a complete list of investigations, let alone a full list of writings corresponding to those investigations. I illustrate this point with two examples. First, Aristotle tells us that the study of nature is not complete without a study of "animals and plants." But he does not tell us what it takes to study animals and plants. Yet we know that his study of animals unfolds in an impressive corpus of writings. Second, there is no reference to the *De anima* in the opening lines of the *Meteorology*. In fact, it is not obvious that the study of the soul is conceived by Aristotle as an integral part of his natural philosophy. Some scholars have argued that the *De anima* can be fully integrated into Aristotle's natural philosophy. On their view, its role would be equivalent to that of a philosophical intro-

duction to biology. Others do not deny that the study of the soul is an introduction to the study of life. Yet they insist that the significance of the *De anima* goes beyond the boundaries of Aristotle's natural philosophy. This dispute cannot be settled on the basis of what is said at the beginning of the *Meteorology*. A full discussion of the unique place of the *De anima* in Aristotle's philosophy exceeds the limits of this chapter. Here suffice it to say that in the opening lines of the *De anima* Aristotle introduce the study of the soul as contributing to all truth, but most especially to truth about nature, as the soul is a principle of animals (1.1, 402a4–7). In other words, the study of the soul contributes most obviously to natural philosophy because in order to study life optimally one must engage in the study of the principle of life, the soul. However, the contribution of the *De anima* to theoretical knowledge goes beyond and beside natural philosophy.

The structure of Aristotle's philosophy of nature

The opening lines of the *Meteorology* strongly suggest that Aristotle is centrally concerned with the integration of a range of different natural investigations into a single program of study. This section will attempt to illustrate how this integration is achieved by looking at the place of the *De motu animalium* (hereafter *De motu*) in Aristotle's philosophy of nature. At least at first sight, this short but difficult treatise does not seem to be a very promising case. It has been argued that it does not belong to natural philosophy (or to any other Aristotelian science for that matter). On this interpretation, it would be an "interdisciplinary work" or even "a [deliberate and fruitful] departure from the *Organon* model" (Nussbaum 1978: 113). Hopefully, a fresh look at the opening lines of the *De motu* will help, not only to establish that this work pertains to natural philosophy, but also to show how it contributes to the explanatory project pursued by Aristotle.

In the first book of the *De partibus animalium*, Aristotle is quite emphatic on the need to provide explanations of certain features of animal life ranging across species. According to Aristotle, such common explanations are necessary not only to avoid tedious repetitions but also to shed light on salient explanatory features that might be otherwise missed. His examples are sleep, respiration, growth, decline, and death (1.1, 639a19–20). Aristotle adds that in studying what is common, we should not overlook the fact that there are important articulations that also have to be taken into account. In this context, animal locomotion (*poreia*) is introduced as a vivid example and a correction against the danger of oversimplification. More directly, a study of animal locomotion is to be a study of the different ways in which animals move around (1.1, 639b1–3). This methodological remark is often read as a theoretical motivation for the investigation conducted in the *De incessu animalium* (hereafter *De incessu*). Interestingly enough, the opening lines of the *De motu* suggest that it is not sufficient to explain swimming, flying, walking, and the like. In addition, the student of nature should look for a common causal account of animal motion. This is the task that Aristotle sets for himself in the *De motu*. His view is that every investigation must be organized around a single *genos*, which is to say a natural (as opposed to an arbitrary) division of reality. The *De motu* is no exception to the rule. Its *genos* is animal motion.

Thinking about the *De motu* as the study of a special kind of *kinēsis*, namely animal motion, helps to understand how it is possible for Aristotle there to invoke, directly and unequivocally, principles that he has established in his most general treatment of change. In *Physics* 8 Aristotle has established that self-change is the origin of all

other changes, and that self-change is to be analyzed into a changer and something that is changed. Both truths are taken as axiomatic in the opening lines of the *De motu*. Moreover, Aristotle takes it as axiomatic that there must be a first unchanged changer at the beginning of all chains of change. This too is established in *Physics* 8. Aristotle, however, is not content with recalling the results established in *Physics* 8. Interestingly enough, he adds that the student of nature has to show that these results fit the particular cases (1, 698a14). Although this methodological recommendation is worded in general terms, animal motion is the particular case that Aristotle has in mind. Note that the student of nature is not just asked to show that there is harmony, or at least absence of conflict, between the general account of motion of *Physics* 8 and the special account of animal motion of the *De motu*. Rather, the student of nature is asked to show that the account advanced in the *De motu* is an application of the general account established in *Physics* 8. These considerations accord with another methodological remark made at the beginning of the *De motu* whose significance is often overlooked. Aristotle says not only that the general account of change offered in *Physics* 8 has to fit the particulars; he adds that it is on account of those particulars that one goes on to look for the general account offered in *Physics* 8. Put differently, it is because we are interested in those particulars that we look for general accounts of the sort that Aristotle gives in *Physics* 8. Hence, even the most general treatment of change of *Physics* 8 is controlled, and indeed shaped, by the observation of the relevant particulars.

I have argued that Aristotle replaced the narrative method adopted by his predecessors with a non-narrative sequence. Now I can be more precise about his alternative explanatory strategy. Aristotle's natural philosophy is a multilayered project involving the integration of general and special investigations. Three accounts of *kinēsis* have been highlighted so far: (1) the general treatment of change advanced in *Physics* 8; (2) the account of animal motion offered in the *De motu*, and (3) the account given in the *De incessu* for each of the different forms or manifestations of bodily displacement (swimming, flying, walking, and the like). All three are causal accounts in the sense that they aim at giving explanations by grasping the relevant cause(s). The claim that the *De motu* and the *De incessu* are causal accounts should be uncontroversial. In both cases, Aristotle announces that he is about to launch in a search for the relevant causes. As for *Physics* 8, we should not forget that this investigation ends with the discovery of a first principle which is also a causal principle. At least one feature of the multilayered project pursued by Aristotle is noteworthy. The special investigations conducted in the *De motu* and the *De incessu* depend, crucially, on the results achieved in *Physics* 8. It is impossible to arrive at a full understanding of animal motion without prior knowledge of what Aristotle says on the topic of change (and in particular self-change) in *Physics* 8. However, the converse is not true. The student of nature can (and, in fact, is expected to) engage in the general study of change offered *Physics* 8 without prior knowledge of *De motu* and the *De incessu*. This study does not depend for its confirmation on the results reached in the context of the study of animal motion. In this sense, we can speak of a scientific autonomy of the general investigations conducted in the *Physics*. This feature of the project pursued by Aristotle allows for a selective reading of his writings on natural philosophy. In other words, it is possible to read the eight general essays collected in *Physics* to the exclusion of the rest of Aristotle's physical writings. Of course, such a selective reading of Aristotle's writings does not do full justice to the integrity of his project. It is nevertheless permitted by how Aristotle conceived of this project.

I note, in passing, that the opening lines of the *De motu* contain an implicit attempt

to recast the account given in the *De incessu*. Whereas the *De incessu* is introduced as a study of the bodily parts involved in animal locomotion, the beginning of the *De motu* places an emphasis on the distinct forms of animal locomotion. The attempt to recast the content of the *De incessu* is best understood in light of the suggestion that the object of study of *Physics* 8, the *De motu*, and the *De incessu* is in all three cases *kinēsis*, but that *kinēsis* is studied at three different levels of generality. Interestingly enough, the attempt to recast the content of the *De incessu* as an investigation of the different forms of animal motion is not unique to the opening lines of the *De motu*. In the *De caelo*, Aristotle refers to the *De incessu* as a study of animal motions (*kinēseis*: 2.2, 84b13). The plural is especially significant as it places an emphasis on the existence of different species of animal motions. There are three other explicit references to the *De incessu*. They are all found in *De partibus animalium*. Again, they all refer to a causal investigation of animal locomotion (4.11, 690b15 and 692a17: *poreia*; 4.13, 696a10–13: *poreia* and *kinēsis*). Perhaps the last reference is the most interesting. It provides further evidence of what looks like a deliberate tendency to present the content of the *De incessu* as a study of a special type of *kinēsis*, namely animal motion.

As the discussion up to this point clearly indicates, the study of animals is strongly integrated by Aristotle within the theoretical framework of his natural philosophy. This point needs to be stressed as there is a tendency to think of what we call Aristotle's biology as an independent and self-contained domain of investigation. This tendency is not encouraged by Aristotle. Quite the contrary, his language is carefully crafted to avoid giving the impression that the study of animals is an autonomous investigation, let alone a science in its own terms. It is telling that Aristotle never calls it a science (*epistēmē*). It has been argued that Aristotle makes this study a central, if not even exemplary, part of his natural philosophy (Lennox 2005: 69). On this reading, it is only in the study of animals that Aristotle fully deploys all the explanatory tools devised for the study of nature. Natural teleology is the most obvious example. Although the use of ends and goals is introduced and defended in *Physics* 2, natural teleology is fully at work only in the study of animals. It is by studying how Aristotle uses teleological explanations in the study of animals that we can fully understand the role that Aristotle assigns to ends and goals in the explanation of natural phenomena (for such a study, I refer the reader to Leunissen 2010). This does not mean that the *Physics*, let alone *Physics* 2, supplies all the explanatory starting points needed for an adequate study of animal life. Additional principles, specific to the study of animals, are needed. They are introduced in the first book of the *De partibus animalium*. But Aristotle is adamantly clear that the explanatory starting points he is introducing are principles for the study of *nature*, and not principles for the study of *animals*. It is very telling that, even if his focus is on animals, Aristotle is consistently speaking of *natural investigation* or *natural science* (1.1, 639a12; 640a2; 641a33–34; 641b11; 1.4, 644b16). In other words, there is only one theoretical framework. It is first introduced in the *Physics* and is further elaborated in the first book of the *De partibus animalium*.

Thinking about the complex nature of Aristotle's explanatory project may help, if not to overcome, at least to mitigate, the sense of disorientation, and indeed the frustration, often felt in reading the opening chapters of the *De motu*. These chapters have been described as a "blend of cosmological and biological speculation" (Nussbaum 1978: 108). In fact, the *De motu* is impervious to the distinction between cosmology and biology, and adopting this language does not help us to fully appreciate what Aristotle is trying to accomplish in this treatise. While animal motion is the first and foremost

concern in the *De motu*, the study of animal motion—and the explanatory resources introduced in the *De motu*—may be used to illuminate the general structure of motion. This is most evident in *De motu* 3 and 4. There, Aristotle is dealing with two difficulties (*aporiai*). The first goes something like this: every motion requires a point of rest, and celestial motion is no exception to the rule. Where is the point of rest in this case? Can this point be inside the *cosmos*? The idea is illustrated with the image of a giant, Atlas, who would set the heavens in motion by supporting himself against the earth. Aristotle argues that this model of explanation would be physically impossible as the earth is too small to act as a point of support. In fact, the earth would be displaced from its natural place, the center of the world, as soon as Atlas tried to set the heavens in motion. The thought that the earth could be displaced from the center of the *cosmos*, should one apply a sufficient force, presents a new *aporia* for Aristotle, as he is committed to the view that the earth occupies the center of the world not because there is no force available that can displace it from there but of necessity. In other words, the particular arrangement of the *cosmos*—the earth at the center and the heavens rotating around it—is not merely contingent on not having a force big enough to displace the earth from the center. Rather, it is to be understood as a necessary truth. So the second *aporia* goes something like this: how do we establish the desired conclusion, namely that of necessity the earth is at the center of the world and the heavens rotate around it? Surprisingly enough, Aristotle does not solve this *aporia*. He is content to say that this *aporia* will be discussed somewhere else (*De mot. an.* 4, 699b31). This can be taken in at least two ways: (1) it may mean that the *De motu* does not have the conceptual resources to solve the *aporia*; or (2) it may mean that *natural philosophy* does not have the conceptual resources to solve this *aporia*. Although Aristotle does not offer a solution to the *aporia*, he does indicate that the solution requires a direct invocation of the existence of the first absolutely unchanged changer. The reference to this principle may be taken as evidence that natural philosophy depends on first philosophy for the solution of this *aporia*.

Celestial and sublunary physics

In antiquity, there is nothing even remotely similar, in scope and ambition, to Aristotle's natural philosophy. His writings present the student of nature with a new theoretical framework and an unprecedented set of epistemological concerns in connection with the unity, organization, boundaries, and indeed self-containment of natural philosophy. Moreover, these writings often entail a bold revision of the previous study of nature. Let us return to the opening lines of the *Meteorology*. There, Aristotle announces that he is about to engage in a new study: "There remains for consideration a part of this investigation which all the predecessors called meteorology [*meteōrologia*]. It is concerned with events that are natural, though their order is less perfect than that of the first element of bodies" (*Mete.* 1.1, 338a25–b21). Aristotle lists a few phenomena that he will explain, including the Milky Way, comets, earthquakes, and winds. At least at first sight, it is not obvious that these phenomena are to be studied by a single investigation. In the *Meteorology*, Aristotle is able to secure explanatory (that is, causal) unity by showing that all these phenomena can be explained in terms of a material cause (a dry and a moist exhalation) together with an efficient cause (the motion of the celestial bodies). (For an excellent study of the explanatory strategy employed by Aristotle to secure the unity of project offered in *Meteorology* 1–3, see Wilson 2009: 63–88.) However, Aristotle is not

content with showing that there is a single discipline that is concerned with all these phenomena; by distinguishing these phenomena from the celestial ones, he is proposing a radical revision of the Presocratic investigation of nature. This revision ultimately depends on his most audacious and bold reform of the previous investigation of nature, the introduction of a celestial simple body distinct from earth, water, air, and fire. As a result of this reform, meteorology is restricted to the study of a number of phenomena that take place in the sublunary region of the natural world. At the very least, Aristotle is not forthcoming about this revision of the previous tradition of natural investigation. In the opening lines of the *Meteorology*, Aristotle announces that he is about to engage in what his predecessors called *meteōrologia*. Yet what they called *meteōrologia* was emphatically not Aristotle's meteorology. Presocratic physics was impervious to the distinction between meteorology and celestial physics. More directly, the Presocratic study of *ta meteōra* was the study of all the things in the sky, including the celestial ones. Moreover, this study was often identified with the study of nature. This explains why, before Aristotle, the epithet *meteōrologos* could be used to refer to someone who has an interest in the study of the whole nature. For instance, Hippodamus of Miletus is remembered as a *meteōrologos* (cf. Aristotle, *Politics* 2.8, 1267b22 ff.: "Hippodamus, the son of Euryphon, a native of Miletus … also aspired to be learned in the study of the whole nature"). To cut a long story short, meteorology as a branch of sublunary physics is an Aristotelian innovation. This innovation depends not only on Aristotle's theory of the two exhalations; it also depends, crucially, on his division of the natural world into a celestial and a sublunary part. (For more on the use of *meteōra*, *meteōrologos*,and *meteōrologia* before Aristotle, see Capelle 1912: 414–448.)

When we say that for Aristotle the natural world consists of a celestial and a sublunary part we do not do full justice to his position. In antiquity it was common to think of the celestial world as a somehow special region of the world. Stability and incorruptibility were often postulated as the differentiating features of the celestial world. Aristotle's position is stronger than a generic commitment to the incorruptibility and stability of the celestial world. His position is that there is a *material* discontinuity between the celestial and the sublunary regions of the natural world. Aristotle is famously committed to the existence of a special simple body that naturally moves in a circle. This body is not just different from earth, water, air, and fire; at least for Aristotle, it cannot be reduced to earth, water, air, and fire. In fact, the expressions "fifth body," "fifth element," or "fifth substance" (which are never used by Aristotle) are themselves an indication of how the celestial simple body was received in antiquity. This body was regarded as an additional substance alongside earth, water, air, and fire whose theoretical necessity was very dubious at best.

The thesis that the heavens are made of a special simple body, unique to them, was resisted even within the Peripatetic school. It is certain that Strato of Lampsacus, the second head of the Lyceum after Aristotle, rejected this thesis. In the doxographical tradition, he is credited with the view that the heavens are made of fire. Strato is a particularly instructive example, as he managed to become head of the school even if he did not agree with Aristotle on the material composition of the heavens. At least at this early stage of the Aristotelian tradition, this view was evidently expendable. Xenarchus of Seleucia is another remarkable example of rebellion against this view. Xenarchus is described by our sources as a Peripatetic philosopher. His activity can be dated to the second half of the first century BC. From Simplicius'commentary on the *De caelo*, we learn that Xenarchus wrote a book against the fifth substance. It is not clear whether

Simplicius is providing the title of the book, giving information about its content, or doing both. However, the polemical nature of this book cannot be disputed. The target is the thesis that the heavens are made of a celestial simple body distinct from and not reducible to earth, water, air, and fire. Xenarchus advanced objections and raised difficulties with the intent to refute this thesis. It is also clear that Xenarchus focused on the arguments advanced in the *De caelo*.

A study of the reasons that led Peripatetic philosophers like Strato or Xenarchus to criticize Aristotle's celestial physics may help us to better appreciate how unusual and controversial Aristotle's conception of the natural world was, even by the ancient standards. The reception of Aristotle's thesis on the material composition of the heavens suggests that his strong division of the natural world into a celestial and a sublunary region was not only exceptional; it was also anomalous. While Aristotle argues, against all his predecessors, that the celestial world is radically different from the sublunary world, he is not envisioning two disconnected or only loosely connected worlds, the heavens and the sublunary world. His view is that there is one and only one world, the natural world; however, at least for Aristotle, this world exhibits unity without uniformity. This has enormous consequences for his project of investigation. For one thing, Aristotle is extremely reluctant to engage in an investigation of the celestial world when and where the lack of information at his disposal cannot be overcome by an appeal to the similarities between celestial and sublunary natures. This reluctance may help to explain the highly selective discussion of celestial physics offered in the second book of the *De caelo*. There is an obvious tension between Aristotle's commitment to study the natural world in all its parts and the limitations to what can be known of the celestial world resulting from his idiosyncratic conception of the natural world. (More on this topic in Falcon 2005: 85–112. Cf. Bolton 2009: 51–82.)

The reception of Aristotle's philosophy of nature in antiquity

Despite the obvious attempt that Aristotle makes (most notably in *Physics* 1) to connect his natural philosophy with the Presocratic study of nature, his philosophy of nature stood out as a challenge to the traditional study of nature that goes back to the Presocratics. It is significant, I think, that this tradition continued to dominate the study of nature after Aristotle. Both Stoic and Epicurean physics are best understood as continuing the tradition of Presocratic physics. This tradition is well exemplified in Stoic physics. This physics can be understood as an attempt to combine Presocratic and Academic physics (Sedley 2002: 41–83). Seen in this context, the relative lack of impact of Aristotle's philosophy of nature during the Hellenistic period may be more a reflection of the fact that this philosophy was perceived as an unnecessary deviation from the tradition of Presocratic study of nature than a consequence of the fact that his writings on natural philosophy did not circulate widely. In other words, "if Aristotle's works were little read in the Hellenistic period, this was not because they were unavailable but because—however strange this may seem to modern interpreters for whom Aristotle is a central figure in the whole history of philosophy—they were not considered of great interest" (Sharples 1999: 132).

A study of the reception of Aristotle's natural philosophy suggests that Aristotle's views remained difficult to digest at least until Alexander of Aphrodisias (first half of the third century AD). As a professor of Aristotelian philosophy, Alexander was concerned not only with explicating this philosophy but also with defending it. He strenu-

ously defended Aristotle's natural philosophy, especially in his commentaries on the *De caelo* and on the *Physics*. These commentaries are now lost, but the extant evidence (preserved mostly by Simplicius) suggests that Alexander was engaged in an extensive defense of Aristotle's account of the natural world. It is important to realize that Alexander may have been not only the first but also the last true defender of Aristotle's natural philosophy in antiquity. More directly, the Peripatetic tradition ceased to exist as a separate tradition in the ancient world right after Alexander. Of course, this did not mean that the study of Aristotle stopped with Alexander. Aristotle's works remained a fundamental part of the philosophical curriculum until the very end of antiquity. But the engagement with these works was motivated by a new set of interpretative values and principles. For one thing, most philosophers considered themselves followers of Plato. Their starting point in natural philosophy was the *Timaeus*. But they were convinced that Aristotle's writings on natural philosophy could be integrated within a Platonic framework, so they made a conscious effort to produce a synthesis of Plato and Aristotle. I cannot engage in an extensive discussion of the exegetical strategies employed by philosophers in late antiquity. Here I am content to draw attention to their selective approach to Aristotle's writings on natural philosophy. Their interest is limited to the *Physics*, the *De caelo*, the *On generation and Corruption* and the *Meteorology*. It is telling that no commentary was ever written on the biological writings. These writings remained outside the philosophical curriculum, as they were considered merely technical works. This is no small thing if we keep in mind that about half of the writings on natural philosophy is concerned with the study of life. For instance, no commentary was ever written on the *De motu* and the *De incessu*. Michael of Ephesus, who set for himself the task to complete the ancient commentary project, filled this lacuna in the twelfth century (his commentaries on the *De motu* and the *De incessu* can be found in translation in Preus 1982).

References

Bolton, R. (2009) "Two Standards for Inquiry in Aristotle's *De caelo*," in A. C. Bowen and C. Wildberg (eds.) *New Perspectives on Aristotle's* De caelo, Leiden/Boston: Brill: 51–82.

Capelle, W. (1912) "*Meteōros – meteōrologia*," *Philologus* 71: 414–448.

Falcon, A. (2005) *Aristotle and the Science of Nature: Unity without Uniformity*, Cambridge: Cambridge University Press.

Lennox, J. G. (2005) "The Place of Zoology in Aristotle's Natural Philosophy," in R. W. Sharples (ed.) (2005) *Philosophy and the Sciences in Antiquity*, London: Ashgate: 58–70.

Leunissen, M. (2010) *Explanation and Teleology in Aristotle's Science of Nature*, Cambridge: Cambridge University Press.

Menn, S. (2006) "Aristotle," in D. Borchert (ed.) *Encyclopedia of Philosophy*, 2nd edition, Farmington Hills, MI: MacMillan Reference: Vol. 1: 263–282.

Nussbaum, M. (1978) *Aristotle's De motu animalium*, Princeton, NJ: Princeton University Press.

Preus, A. A. (1982) *Aristotle and Michael of Ephesus on Movement of Animals and Progression of Animals*, Berlin: Olms.

Sedley, D. N. (2002) "The Origins of Stoic God," in D. Frede and A. Laks (eds.) (2002) *Traditions of Theology: Studies in Hellenistic Theology, its Background and Aftermath*, Leiden/Boston/Köln: Brill: 41–83.

Sharples, R. W. (1999) "The Peripatetic School," in D.J. Furley (ed.) (1999) *From Aristotle to Augustine. Routledge History of Philosophy*, vol.2, London: Routledge: 147–187.

Solmsen, F. (1960) *Aristotle's System of the Physical World: A Comparison with his Predecessors*, Ithaca, NY: Cornell University Press.

Wilson, M. (2009) "A Somewhat Disorderly Nature: Unity in Aristotle's *Meteorology* I–III," *Apeiron* 42: 63–88.

Further reading

Balme, D. M. (1992) *Aristotle: De partibus animalium I and De generation animalium I*, Oxford: Clarendon Press (an English translation, with introduction and notes, of *De partibus animalium* 1 and *De generatione animalium* 1).

Bodnár, I. (1997) "Movers and Elemental Motions in Aristotle," *Oxford Studies in Ancient Philosophy* 15: 81–117 (a study of Aristotle's theory of elemental motion).

Bostock, D. (2006) *Space, Time, Matter, and Form: Essays on Aristotle's Physics*, Oxford: Oxford University Press (a collection of essays on Aristotle's metaphysics of nature).

Bowen, A. C. and C. Wildberg (eds.) (2009) *New Perspectives on Aristotle's De caelo*. Leiden/Boston: Brill (the only collection of essays on the *De caelo*).

Broadie, S. (2007) "Nature and Craft in Aristotelian Teleology," in S. Broadie (2007), *Aristotle and Beyond*, Cambridge: Cambridge University Press: 85–100 (an examination of Aristotle's use of craft as a model for the study of nature).

Brunschwig, J. (1991) "Qu'est-ce que 'la physique d'Aristote'?," in F. De Gandt and P. Souffrin (eds.) (1991) *La Physique d'Aristote et les conditions d'une science de la nature*, Paris 1991: 11–40 (an excellent introduction to Aristotle's *Physics*).

Charlton, W. (1970) *Aristotle: Physics I and II*, Oxford: Clarendon Press (English translation, with introduction and notes, of *Physics* 1 and 2).

Coope, U. (2005) *Time for Aristotle*, Oxford: Oxford University Press (a study of Aristotle's conception of time as presented in the *Physics*).

Corcilius, K. (2008) *Streben und Bewegen: Aristoteles' Theorie des animalischen Ortsbewegung*. Berlin/New York: De Gruyter (a study of Aristotle's theory of desire and animal locomotion).

De Haas, F. and J. Mansfeld (eds.) (2004) *Aristotle's On Generation and Corruption I*, Oxford: Clarendon Press (proceedings of the 15th Symposium Aristotelicum).

Freeland, C. (1990) "Scientific Explanation and Empirical Data in Aristotle's Meteorology," *Oxford Studies in Ancient Philosophy* 8: 67–102 (a study of Aristotle's practice in Aristotle's *Meteorology*).

Freudenthal, G. (1995) *Aristotle's Theory of Material Substance*, Oxford: Oxford University Press (a study of the concept of vital heat and inborn *pneuma*).

Gotthelf, A. (2012) *Teleology, First Principles, and Scientific Method in Aristotle's Biology*, Oxford: Oxford University Press (a collection of essays on the philosophical significance of Aristotle's biology).

Gotthelf, A. and J. G. Lennox (eds.) (1987) *Philosophical Issues in Aristotle's Biology*, Cambridge: Cambridge University Press (a collection of seminal essays on Aristotle's philosophy of biology).

Graham, D. (1999) *Aristotle: Physics: Book VIII*, Oxford: Clarendon Press (an English translation, with introduction and notes, of *Physics* 8).

Hussey, E. (1983) *Aristotle's Physics: Books III and IV*, Oxford: Clarendon Press (an English translation, with introduction and commentary, of *Physics* 3 and 4).

Johnson, M. R. (2005) *Aristotle on Teleology*, Oxford: Oxford University Press (a comprehensive examination of Aristotle's theory and use of teleology).

Judson, L. (ed.) (1991) *Aristotle's Physics: A Collection of Essays*, Oxford: Oxford University Press (a collection of essays on Aristotle's *Physics*).

Kelsey, S. (2003) "Aristotle's Definition of Nature," *Oxford Studies in Ancient Philosophy* 25: 59–87 (a study of Aristotle's conception of nature).

—— (2010) "Hylomorphism in Aristotle's *Physics*," *Ancient Philosophy* 30: 107–124 (a re-examination of the doctrine that natural objects are composites of matter and form).

Kosman, A. (1969) "Aristotle's Definition of Motion," *Phronesis* 14: 40–62 (a study of the definition of motion offered in *Physics* 3.1).

Kullmann, W. and S. Föllinger (eds.) (1997) *Aristotelische Biologie*, Stuttgart: Franz Steiner Verlag (a collection of essays on Aristotle's biology).

Lang, H. S. (1998) *The Order of Nature in Aristotle's Physics*, Cambridge: Cambridge University Press (an examination of Aristotle's conception of elemental motion).

Leggatt, S. (1995) *Aristotle: On the Heavens I and II*, Warminster: Aris and Phillips (an English translation, with introduction and notes, of *De caelo* 1 and 2).

Lennox, J. G. (2001) *Aristotle's Philosophy of Biology: Studies in the Origins of Life Science*, Cambridge: Cambridge University Press (a collection of essays on Aristotle's biology).

—— (2001) *Aristotle: On the Parts of Animals I – IV*, Oxford: Clarendon Press (an English translation, with introduction and notes, of the *De partibus animalium*).

—— (2008) "'As if we were investigating snubness': Aristotle on the Prospects for a Single Science of Nature," in *Oxford Studies in Ancient Philosophy*: 149–186 (a study of *Physics* 2.2).

Mansion, A. (1946) *Introduction à la physique aristotélicienne*, Louvain/Paris (a classic introduction to Aristotle's natural philosophy).

Morison, B. (2002) *On Location*, Oxford: Oxford University Press (a study of Aristotle's conception of place as presented in the *Physics*).

Quarantotto, D. (2005) *Causa finale, sostanza, essenza in Aristotele. Saggio sulla natura dei processi telologici naturali e sulla funzione del telos*, Naples: Bibliopolis (a study of teleology largely based on *Physics* 2 and *De partibus animalium* 1).

Rashed, M. (2004) "Agrégat de parties ou *vinculum substantiale*? Sur une hésitation conceptuelle et textuelle du *corpus* aristotélicien," A. Laks and M. Rashed (eds.) *Aristote et le mouvement des animaux*, Villeneuve d'Ascq: Presses Universitaires de Septentrion: 185–202 (a study of the manuscript tradition of the *Parva naturalia*).

Roark, T. (2011) *Aristotle on Time: A Study of the Physics*, Cambridge: Cambridge University Press.

Wardy, R. (1990) *The Chain of Change: A Study of Aristotle's Physics VII*. Cambridge: Cambridge University Press (a detailed study of *Physics* 7).

Waterlow, S. (1982) *Nature, Change, and Agency in Aristotle's Physics*, Oxford: Oxford Clarendon Press (an investigation into Aristotle's metaphysics of nature as expounded in the *Physics*).

Williams, C. J. F. (1982) *Aristotle's De generatione et corruptione*, Oxford: Clarendon Press (an English translation, with introduction and notes, of the *De Geneartione et corruptione*).

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23
FIRST PHILOSOPHY FIRST: ARISTOTLE AND THE PRACTICE OF METAPHYSICS

Christopher Shields

I Aristotle's *Metaphysics* and the Study of Metaphysics

We begin with a word unknown to Aristotle: *metaphysics*. As practiced today, the study of metaphysics comprises a loosely-stitched motley. A first course in the subject will likely run through a range of topics including universals, diachronic identity, individuation, possibility and necessity, numbers and other abstract entities, causation, propositions, time, and general debates concerning realism *versus* anti-realism. Those familiar with the writings of Aristotle will recognize his interest in some but not all of these topics, and will also recognize that such interest as he had in them was not localized in the work which came to bear the unknown word as its title, the *Metaphysics*. He does discuss several of these topics in that work, some extensively and others glancingly, and he treats several more of them, often only discontinuously, in his *Physics*, *Categories*, *De Interpretatione*, and *Posterior Analytics*, as well as in less well developed passages scattered elsewhere throughout his corpus, including notably his works in biology written with a primarily empirical orientation. Even so, despite his deep interest in many of these topics, metaphysics as we practice it today overlaps only partially with the area of theoretical inquiry which Aristotle pursues in the work now called the *Metaphysics*.

The story of how Aristotle's work on first philosophy came to be called the *Metaphysics* is fascinating (well told by Moraux 1951), but it relates to our present concern only incidentally, in so far as it bears on the question of which subject matter Aristotle's *Metaphysics* in fact treats. According to a conventional story of its naming, we should not be encouraged by the work's title to suppose that the *Metaphysics* is about metaphysics at all. The title reportedly owes to Andronicus of Rhodes, a head of the Aristotelian school in the mid-first century BC (Ammonius *in De int.* 5.24; Plutarch *Sulla* 26), who collected and arranged Aristotle's works. Andronicus is said to have slotted Aristotle's treatment of first philosophy into an ordered collection after (*meta*) his work investigating puzzles pertaining to nature (*phusis*), appropriately entitled *Ta Phusika*, the *Physics*, yielding, then, *Meta Ta Phusika*, or *Metaphysics*—the work following the *Physics*. Whether or not it is apocryphal (Chroust 1961 gives compelling reasons for supposing

that it is), this story appropriately gives us pause: we should not presume that Aristotle's *Metaphysics* takes as its focus the subjects constituting the motley of the contemporary classroom curriculum.

On the contrary, the word *metaphysics* began to have something of its broader, contemporary meaning only in the seventeenth century, when metaphysicians started to expand their traditional interest in *the nature of* being into allied issues about the natures of various *kinds of beings*. This circumstance quite reasonably led the German philosopher Wolff to rechristen traditional metaphysics as *ontology*—the study of being—which thereafter came to be regarded as but one branch of metaphysics.

This older, narrower conception of metaphysics as the study of being points us in the direction of Aristotle's notion of first philosophy (*protē philosophia*), which he also called the *science of being qua being*, *theology*, or somewhat jarringly in terms of present-day English diction, simply, *wisdom* (*sophia*; *Metaph.* A.2, 982a16–19, 982b9; B.2, 996b9; K.1, 1059a18–34; K.2, 1060a10). He approaches the activity of wisdom in a general way near the beginning of the *Metaphysics* by asking a direct question:

> It is evident that *wisdom* (*sophia)* is a science (*epistēmē*) of certain principles and causes (*archai* and *aitiai*). But since this is the science we are seeking, this is what we must consider: of what sorts of principles and causes is wisdom (*sophia*) a science (*epistēmē*)?
>
> (*Metaph.* A.2, 982a1–6)

He answers:

> It [*sophia*] must be a science (*epistēmē*) of *first* principles and causes (*prōtai archai* and *aitiai*).
>
> (*Metaph.* A.2, 982b9–10)

Unlike other sciences, all of which equally investigate causes (*aitiai*; also rendered as *explanations* or, in some cases, *reasons*) and principles (*archai*; also *sources* or *origins)*, first philosophy considers those causes and principles which are first, or primary (*prōtai*).

Two questions concerning Aristotle's approach to first philosophy thus naturally arise. If it considers first causes and first principles, then first philosophy studies the first causes and first principles *of what*? Further, whatever these first causes and first principles may cause and originate, in virtue of what are they first, or primary (*prōtai*)? Needless to say, these questions are related, since, as Aristotle implies, the primary principles and causes are likely to be the principles and causes of primary things. For these reasons, Aristotle's approach to first philosophy immediately focuses our attention on a question of abiding difficulty, one which begins to look something like a characteristically ontological question: what are the primary beings and in virtue of what do they qualify as primary? Why, indeed, suppose that some beings *are* primary relative to other beings?

By addressing questions of this sort, Aristotle embarks on the activity of first philosophy. He begins this activity, as he often begins any topic of concern to him, by formulating some of the problems and puzzles he thinks the philosopher should answer and then also by reflecting upon some questions for study generated by these puzzles.

II The questions of first philosophy

It is worth appreciating these features of Aristotle's method, since when first confronting the opening chapters of Aristotle's *Metaphysics*, we find ourselves faced with texts which are likely to seem rather alien, at least from the vantage of contemporary metaphysics. In the first book of the *Metaphysics*, Aristotle takes stock of the opinions already advanced in this area of inquiry, because he thinks that doing so is propaideutic to making progress in first philosophy as, indeed, it is in any other area of philosophy (*Metaph.* A.3–10). (For a general introduction to Aristotle's method, see Shields 2007: §1.4.) Once satisfied with this preliminary excursus, he formulates a series of *aporiai*, or difficulties, to be confronted, and then sets the particular questions that need to be addressed in light of them.

Aristotle's approach is thus broadly *endoxic*. That is, he collects and considers the credible views, or *endoxa*, concerning his subject matter, because he thinks it advisable to survey the progress which has been made prior to his own investigations (*Top.*1.1, 100b21– 23). His endoxic method is keyed to what he calls the *phainomena*: he reflects upon the ways things generally appear (the *phainomena*), and formulates his puzzles and problems pursuant to incongruences arising from reflection on them. Although not beholden to the *phainomena*, Aristotle does indicate that at least in some domains we do well to preserve as many as them as possible (*Eth. Nic.*7.1, 1145b2–30); even so, he equally thinks that we should not be slavishly adherent to the way things appear. After all, the *phainomena* themselves sometimes generate the puzzles (*aporiai*) which confront us, because they may conflict with other things we have reason to believe, including the *endoxa*, or indeed, even with other *phainomena* (*Metaph.* Λ.8, 1073b36, 1074b6; *Part. an.*1.4, 644b5; *Eth. Nic.*7.1, 1145b2–30).

By relying upon this method, Aristotle is able to generate a list of very general questions and puzzles about being. The questions he formulates thus constitute a sort of study plan for first philosophy. Only when we appreciate how he understands these questions—what motivates them, why he thinks them important, how they differ from other sorts of theoretical questions—can we begin to understand Aristotle's conception of first philosophy.

He in fact retails a long list of such study questions, including one he calls the hardest question of all:

> Further, one must consider the question that is the hardest question of all, and the one which introduces the greatest perplexity (*aporia*): are one and being the substances of beings, just as the Pythagoreans and Plato said, and not properties of other things? Or is this not so, since their substratum is something else? (Just as Empedocles says it is love, another says it is fire, and another air, and another water.)
>
> (*Metaph.* B.1, 996a8–12)

The point of this question is not immediately easy to fathom: it seems alien to our current concerns in metaphysics. What is at issue in the question of whether "one and being are the substances of beings"?

To see what this question means to Aristotle, we may begin by reflecting on how he contrasts it with the questions of other, more familiar branches of inquiry. He says that the questions such as this one, the questions of first philosophy, follow on from the sorts of

questions he has pursued in his *Physics* (*Metaph.* α.1, 993b11–27) and that they are different and superior to the kinds of questions he has asked in the practical arena of his ethical writings, presumably his *Nicomachean* and *Eudemian* Ethics (*Metaph.* A.1, 981b25–982a3). They seem superior at least in part because of the elevated status of the objects they investigate (*Metaph.* A.2, 983a1–10). That is, since it studies objects superior to the objects of other, perfectly important and worthy forms of study, whether practical, productive, or theoretical, first philosophy is pre-eminent among the sciences.

In marking first philosophy as pre-eminent, Aristotle highlights what is distinctive about it, but not in a way that obviously redounds to its credit. Physics, as Aristotle understands it, addresses questions about the nature of change and generation, together with some perennially puzzling issues about time and the infinite which follow from them, and then also some general methodological matters concerning the nature of causation and explanation. The point of these investigations is reasonably clear. Physics arises spontaneously as we try to come to grips with the *phainomena* of the natural world. We observe things being generated and changing; so, we are led to wonder about the causes and characters of change and generation. Similarly, the study of mathematics seems to foist itself upon us as soon as we begin to think about the more abstract aspects of these same *phainomena*. For instance, because we think that change has spatial and temporal dimension we naturally come to wonder about the character of space and time, neither of which seems immediately easy to conceptualize as either finite or infinite. Consequently, when we are confronted with puzzles (*aporiai*) about change, space and time, we are led quickly to the topic of the infinite, and so to the study of mathematics. If not inevitable, inquiry into these matters arises without reflection and requires not special pleading.

Matters shift abruptly when we turn to Aristotle's most exalted form of theoretical science, first philosophy. Even if we "by nature desire to know" (*Metaph.* A.1, 980a21), as Aristotle contends, it is not immediately clear why we should wish to know the answers to some of the questions he poses in the early books of his *Metaphysics*. In addition to the difficult question concerning whether being and oneness already introduced, we may consider another initially rather odd-sounding question: "If not the philosopher, who will ask whether Socrates and Socrates seated are one and the same?" (*Metaph.* Γ.2, 1004b1–3). This seems markedly unlike the sorts of questions posed by the ethicist who wishes to know what sort of life we are to lead, or by the political scientist trying to determine how best to organize human society to that end. What exactly does Aristotle's philosopher want to know? The question of whether Socrates and Socrates-seated are one and the same hardly seems to foist itself upon anyone, not even upon someone disposed to pursue highly abstract matters, such as the physicist or the mathematician. Until we see why this sort of question is worth asking and answering, we are at sea with respect to Aristotle's enterprise of first philosophy (*protē philosophia*).

III First questions first: Socrates and Socrates-seated

We make good progress towards grasping Aristotle's meanings and motivations in first philosophy if we begin by considering his initially perplexing preoccupation with the question of whether Socrates and Socrates-seated are one and the same. This is a striking example of a question which, according to Aristotle, typifies and to some extent justifies the elevated enterprise of first philosophy.

At first blush, this question is apt to seem more idle than elevated. After all, in some sense Socrates and Socrates-seated very clearly *are* one and the same. There seems to

be no *aporia* about this, nothing disconcerting in the *phainomena*. What appears to be the case is that there is but one man seated on a bench, Socrates, not two, Socrates and some other chap, seated-Socrates, who just happens to be seated in the same place on the same bench on which we currently find Socrates seated. So, in fact, the question may seem not only idle but ill-judged.

To see why Aristotle thinks it is neither, and why the first philosopher inevitably undertakes to answer it, we may proceed in two phases. First, we should consider it in relation to the hardest question of all, as Aristotle calls it; but we should then also consider the context in which Aristotle poses this question. In this way we can discover his motivation for posing it: Aristotle thinks it makes vivid the hardest question of all.

The hardest question of all most certainly concerns being and unity. Beyond that, however, Aristotle's meaning is rather obscure. In fact, his question seems to be not one but several:

- Are unity and being substances?
- Or are unity and being rather attributes of other things?
- Might unity and being rather be a substratum? Or might the substratum be something else, like love, or fire, or water, or air?

He suggests that Plato and the Pythagoreans were in the habit of answering the first question in the affirmative: they thought unity and being were the substances of things. Consequently, according to Aristotle, they were constrained to believe that all things which are unified are *essentially* unified, that the very essence of any unified thing is to be unified. Although we might reasonably wonder whether Aristotle's ascriptions here are both fair and accurate, we may set that concern aside in the present context. What matters in the present context is rather this: Aristotle is wondering *why* Plato and Pythagoras say that unified beings count as unities and as beings. Should we ourselves say that everything which is one thing qualifies as one in precisely the same way? Of course, subordinate to this question is another: what does it take for something to qualify as *one* thing as opposed to several? Same again for being: does everything which is a being qualify as a being in precisely the same way? What makes something a being? Are all beings on a par?

As for unity, we may consider a random sample of single things: a human being, a city, a church, a party, an exchange of love letters, a dung heap, the fall of a teardrop. Each of these is a unity at least in the sense that it may be counted; and each, more generally, may be the subject of a sentence and serve as the subject of predications ("The fall of a single tear drop initiated their reconciliation.") Aristotle wonders, among other things, whether all of these unities are unities in the same way. The set of all church altars made of Italian marble is a unity, at least in the sense in which any set qualifies as a single set. Should we say, though, that this unity is a unity on par with one man toiling on a hot afternoon in an Italian marble quarry? One may pose an analogous sort of question about beings. Does a set of scattered objects have the same sort of being that a human being has? Does the collection of Socrates, a barking dog, and a sofa in Buenos Aires have the sort of being that Socrates himself has? If not, what has Socrates that this collection lacks?

Consider now the putative unity of the seated Socrates in the broader context into which Aristotle introduces this example. Significantly, it occurs in the second chapter

of *Metaphysics* Γ, precisely the book of the *Metaphysics* which opens with Aristotle's announcement that there is a science of being *qua* being:

> "There is a science (*epistēmē*)," says Aristotle, "which studies being *qua* being (*to on hē(i) on*), and the attributes belonging to it in its own right (*kath' hauto*)."
> (*Metaph.* Γ.1, 1003a21–22)

This announcement—"triumphantly affirmed and re-affirmed in the *Metaphysics*," (Guthrie 1981: 206–207)—ought to surprise those familiar with some things Aristotle has said elsewhere in his corpus about the prospects of a general science of being. In particular, in his *Eudemean Ethics* he likens being to another high-level general concept, goodness, and observes flatly: "Just as being is not something single … neither is the good; nor is there a single science of being or of the good" (*Eth. Eud.*1.8, 1217b33–35). Here in the *Metaphysics*, however, we apparently find Aristotle contradicting, or at least reversing, himself. If he has changed his mind then he is also indicating that he himself had earlier not seen the point or possibility of first philosophy, but has now come to appreciate that he was wrong about his earlier view.

This appearance will prove at best misleading, but at present it serves to focus our attention on Aristotle's contention that the business of the first philosopher includes crucially the question of whether Socrates and Socrates-seated are one and the same, a question, again, he asks only shortly after his introduction of the science of being *qua* being. It is, in fact, one of the first questions to which he calls our attention as constituting the activity of the science of first philosophy. Accordingly, Aristotle's attitude towards this question helps to explicate the sort of inquiry he thinks falls to first philosophy and why. He says:

> It falls to the philosopher to be able to investigate all things. For if this does not fall to the philosopher, then who will inquire into whether Socrates and Socrates-seated are the same things, or whether one thing has one contrary, or what contrariety is or how many meanings it has? And similarly with all other such questions. Since, then, these sorts of properties belong *per se* to unity *qua* unity and to being *qua* being—not to things *qua* numbers or lines or fire—it is clear that it falls to this science to investigate both what these things are [viz. unity and being] as well as what coincides with them. And those who study these matters at present go awry not by pursuing philosophical questions, but by failing to understand anything about substance, which is prior to other things … An indication that this is so: dialecticians and sophists assume the same guise as the philosopher, for sophistry has the semblance of philosophy, and dialecticians do engage in dialectic about all things. Now, being is common to all things, and it is clear that they practice dialectic about all things precisely because of its being proper for philosophy to do so. For sophistic and dialectic focus on the same genus of things as philosophy, but philosophy differs from dialectic in the kind of power it has and from sophistic in its choice of life. Dialectic merely probes in areas where philosophy is knowledgeable, while sophistic gives off the appearance of being knowledgeable without in fact being so.
> (*Metaph.* Γ.2, 1004a34–b26)

Aristotle makes a series of crucial claims about first philosophy in this passage, three of which merit special consideration.

First, and most centrally, he means to distinguish first philosophy from *sophistic*. Although first philosophy and sophistic cover the same terrain, he says, only philosophy is legitimate: sophistic is bogus. Second, the bogus characteristics of sophistic come into clear view only when exposed to the bright light of genuine philosophy—and of first philosophy in particular. According to Aristotle, sophistic introduces errors into our thinking about abstract matters by transmitting mistakes characteristic of those lacking in philosophical training. These include especially the mistake of "failing to understand anything about substance, which is prior to other things" (*Metaph*. Γ.2, 1004b8–10). Third, and finally, the philosopher, who remains alert to this sort of priority, must, precisely in order to manifest this form of alertness, investigate being in general, being *qua* being, and unity in general, unity *qua* unity, as well as substance (*ousia*) and its forms of priority.

For the purposes of combating sophistic, then, it will not suffice to investigate this or that kind of being, as for, instance, do the biologist and mathematician. The biologist considers living beings, or, in Aristotle's terminology, beings *qua* living, beings in so far as they are living beings. The mathematician is comparatively abstract in orientation, but still not as abstract or general as the first philosopher. The mathematician investigates not unity as such, but rather, for instance, unities *qua* divisible, or unities *qua* even or *qua* odd. Considering unities *qua* even or odd is already a highly abstract and worthwhile kind of activity, and this is why mathematics qualifies as one of the theoretical sciences; but more abstract and worthier still is the activity of the first philosopher, who considers not just what it is for a number to be a unity, or, conversely for something unified to be a number, but what it is for any kind of being whatsoever to qualify as a unity in the first place, *before*, so to speak, it manifests any other features it may have. This sort of activity, contends Aristotle, is precisely the activity of considering unity *qua* unity—unity insofar as it is unity, and in no other way. If we are to pursue this activity productively, counsels Aristotle, we must avoid the slovenly techniques used by the sophists, because such techniques invariably seduce us into false beliefs.

Aristotle subjects sophistical technique to careful scrutiny in his *Sophistical Refutations*. He offers as evidence for the problematic nature of this technique a series of sophistic arguments, many of which, though plainly problematic, prove less easily disarmed than one might have supposed. One such argument begins innocently enough with a principle of unity which sounds initially unobjectionable: if *x* and *y* occupy the same place and time, then *x* and *y* are one and the same. Armed with just this innocuous seeming principle of unity, the sophist can develop the following argument, to which Aristotle alludes several times in his *Sophistical Refutations* (*Soph. el.* 24, 179a26–b6; cf. *Metaph*. Δ.6, 1015b17; Δ.7, 1017b31; Z.6, 1032a8; *Top*. 1.7, 103a29–35).

1. When Socrates rises, Socrates-seated goes out of existence.
2. Socrates and Socrates-seated are one and the same.
3. So, when Socrates rises, Socrates goes out of existence.

Or, more graphically, as Aristotle represents them, the Sophists may suggest that when he rises, Socrates commits suicide (cf. *Ph*. 1.7, 190a19–21; 7.6, *Eth. Eud*. 1240b25–26).

This argument is plainly specious, but not therefore facile. After all, the first premise seems undeniable, since, as one might naturally suppose, Socrates-seated goes out of

existence at precisely the moment Socrates stands. Yet we have already granted (2) as effectively obvious—if, that is, we have embraced the innocent-sounding principle of unity that whenever *x* and *y* occupy the same place at the same time, then *x* and *y* are one and the same. Otherwise, the logic of the argument seems impeccable. It relies only on the indiscernibility of identicals: the principle that if $a = b$, then *a* and *b* have all of their properties in common. This principle, at least in extensional contexts such as this one, can hardly fail to be both true and applicable. If *a* is the same thing as *b*, then surely whatever holds of *a* holds of *b* and *vice versa*; there is, after all, only one thing in question where *a* and *b* are concerned. So, it seems to follow, since Socrates and Socrates-seated are one and the same, that when one goes out of existence, so too must the other. Consider the matter from a slightly different angle. If Alcibiades one day tussles the hair of the seated-Socrates, then plainly he tussles Socrates' hair as well. Here the inference seems perfectly appropriate and even unavoidable. What happens to Socrates-seated trivially also happens to Socrates. By the same principle, then, should we not expect Socrates to cease to be when Socrates-seated ceases to be?

What, then, has gone wrong? A lively debate has grown up around how Aristotle is best understood as responding to this sophistic argument. According to one prominent interpretation (Matthews 1982), he simply denies (2), and thinks that, contrary to appearances, there are in fact two beings present, namely Socrates and Socrates-seated, and that they overlap, or coincide. They are, on this understanding, one only *coincidentally*. This is to suggest, that is, that the two are one by coinciding in the same space, in much the same way that the town's mayor and the town's postmaster may coincide in the same person when the postmaster happens to be the mayor.

A second approach focuses more firmly on Aristotle's remarks about priority, and has him affirming (2), but denying that it should be interpreted as meaning that Socrates, the substance, or basic being, is the sort of being which could be thought to sit essentially (so Shields 1999: ch. 6). On this approach, the loss of the property, being-seated, has no consequences regarding Socrates' continued existence. Thought of this way, this is the force of Aristotle's contention that sophistic arguments of this sort result from "failing to understand anything about substance, which is prior to other things" (*Metaph.* Γ.2, 1004b8–10).

More exactly, on this approach, the sophistic argument treats Socrates and Socrates-seated as if they were entities of the same type, on an ontological par with one another. According to Aristotle, speaking on behalf of first philosophy, they are not: one is a substance, and the other is not. Socrates-seated is merely a condition in which a substance finds itself, and so cannot be regarded, as the sophist implicitly regards it, as a being in its own right, as if it were somehow capable of existing independently, as Socrates himself does. So, the sophistic proponents of this argument embroil themselves in a category mistake, which, when untangled, shows how they go awry. They simply mistake an item in a non-substantial category, Socrates' being seated, with an item in the category of substance, Socrates.

For present purposes, we may set aside the question of which of these two understandings of Aristotle's response to sophism is to be preferred. What matters in the current context is that debate about this matter is a *metaphysical* debate, and not just any metaphysical debate, but one concerned with unity, being, priority, and categoricity. This is part of what Aristotle means by saying that the proponents of sophistic argument focus on the same genus of things as philosophy. The sophist and the first philosopher alike

focus on Socrates and seated-Socrates, but, given their different approaches to unity and being, they arrive at markedly different positions about them.

Unfortunately, contends Aristotle, "sophistic gives off the appearance of being knowledgeable without being really so" (*Metaph.* Γ.2, 1004b25–26). He uses very similar language when launching an analogous complaint in his *Sophistical Refutations*, "Sophistry gives off the appearance of being wisdom [*sophia*, that is, first philosophy], but is not really so" (*Soph. el.* 11, 171b34–35). The Sophists are *inevitably* making one or more metaphysical assumptions in mounting their arguments; and, as we have now seen clearly, it is hardly a matter of indifference which assumptions they adopt, since different starting points lead to radically different conclusions.

It has emerged that in this particular argument the sophistic assumptions include at least: (i) that Socrates and Socrates-seated are *numerically* one and the same; that, consequently, (ii) whatever happens to the one perforce happens to the other; and, finally, (iii) that neither Socrates nor Socrates-seated has any privileged ontological status relative to the other. Each of these theses is dubious in its own way, and consequently at a bare minimum each needs to be unearthed and defended. After all, using the sophist's own technique, one could as easily argue that since Socrates and Socrates-standing are one and the same, and that Socrates standing is "born" exactly when the seated-Socrates stands, Socrates, although a man of sixty, is born exactly when he rises and not a moment sooner. If that sounds preposterous, then the problem presumably resides in one or more of the otherwise reasonable sounding assumptions upon which the sophists rely.

For this reason, our attitudes towards arguments of this sort inevitably draw upon various principles of unity, versions of which are surreptitiously invoked by those not trained in philosophy. As represented, those proposing this argument began with an innocent-sounding principle to the effect that whenever *x* and *y* occupy the same place at the same time, then *x* and *y* are one and the same. If we wish to reject this principle, or, indeed, even if we wish to embrace it in an enlightened and defensible sort of way, we will need to do something the sophists have failed to do, despite their operating within the sphere of genuine philosophy: we will need to reflect upon the nature and sources of unity, being, and priority, and so, if Aristotle is right, upon the theory of substance and thus, ultimately, upon the theory of categories. We will necessarily, in short, have to engage in the difficult matter of first philosophy.

That we *must* become so engaged follows already from our first articulation of the sophistic argument. Indeed, the sophistic argument already betrays some unspoken commitments about unity and being, commitments which place the proponents of the argument centrally in the philosophical sphere. Accordingly, Aristotle's contention that those proposing the sophistic argument have *already* at least implicitly implicated themselves in the business of first philosophy is really quite general. Even those who refrain from turning their untutored assumptions about unity and being to sophistic ends have in fact implicitly "already" embraced some such assumptions.

This is why it falls to the first philosopher to inquire whether all the beings there are reside on an ontological par, whether, that is, everything that exists does so in just the manner that every other thing exists, or whether some beings depend upon other, more fundamental kinds of beings for their very existence. This inquiry in turn requires an investigation into the question of what makes one being fundamental relative to another. Such questions, then, are finally unavoidable: anyone who says anything at all about change, or generation, or death, or destruction—which is to say, then, anyone

who does any kind of inquiry into the phenomena of nature—presupposes some conception of being and unity, and so accepts, cogently or otherwise, determinate ontological commitments. It falls to the first philosopher to sort out the defensible from the indefensible among such commitments, and for this reason, it falls to the first philosopher to ask whether Socrates and Socrates-seated are one and the same.

IV Being *qua* being: some problems about Aristotle's science

To settle such questions of being, unity, and priority, the questions of first philosophy, we need to reflect upon the nature of being, to determine what beings are, simply as beings, regardless of the kinds of beings they happen to be, and to determine what, if anything, makes some beings more fundamental than other beings. If we approach the *Metaphysics* with these sorts of expectations in mind, then much of Aristotle's practice makes ready sense. Even so, it remains unclear how—or, indeed, whether—Aristotle's various projects in the *Metaphysics* coalesce into some single science of being. On the contrary, perhaps inevitably and as befits the self-reflexive nature of the discipline, Aristotle seems embroiled in a prior problem as to whether there can *be* any such science as first philosophy.

It is noteworthy in this regard that Aristotle several times speaks of first philosophy as the science *being sought* (*Metaph.* A.1–2, 982a1–6; Z.1, 1028b2–4), as if it were somehow obscure, as if its fundamental character needed to be uncovered and its very existence justified. In this first philosophy seems, for the reasons already mooted, unlike Aristotle's other theoretical and practical sciences. Indeed, scholars have long been troubled with a general problem about the science of being *qua* being, namely that Aristotle himself seems committed to principles incompatible with its very existence.

Aristotle seems in different passages to raise reservations about the science he announces in the *Metaphysics* (*Metaph.* Γ.1, 1003a21–22; cf. *Eth. Eud.*1.8, 1217b33–35). We can, in fact, elicit from his writings a triad of seemingly inconsistent theses, each of which is at least initially well motivated:

1. There is a science of being *qua* being (*Metaph.* Γ.1, 1003a21–22).
2. Every science studies a single, unified genus (*An. post.* 1.28, 87a39–b1; *2.7*, 92b14, *Top.* 4.1, 121a16, b7–9; cf. *Metaph.* Γ.3, 998b22).
3. There is no genus of being (*An. post.*2.7, 92b14, *Top.* 4.1, 121a16, b7–9; cf. *Metaph.* Γ.3, 998b22; *Eth. Eud.*1.8, 1217b33–35).

We gain some insight into this matter by focusing first on why Aristotle maintains (2) and (3), the theses that while every science has a unified genus, there is no genus of being. The questions are related, of course. As regards (2), we may advert to the special sciences which Aristotle distinguishes from the science of being *qua* being, sciences whose existence he thinks uncontroversial, including physics and mathematics. In the *Posterior Analytics*, Aristotle sets forth a framework for scientific investigation and exposition according to which every science, when complete, must be expressible using demonstrations (*apodeixeis*), that is, deductively valid arguments whose premises are necessary, universal, and also, more securely known than their conclusions (*An. post.*1.2, 71b16–25; 1.3, 72b5–73a6; *Metaph.* A.1, 981a5–30; Γ.4, 1006a6–18; Z.15, 1039b27–1040a7). The most basic premises of such demonstrations will consequently capture and state the essences of the subject matters of their respective sciences. Thus,

the basic theses of biology will state the fundamental features of all living things, whereas more specific sciences under the general genus of living things will state the essences of their respective domains: those who study plants state the essence of plants, and animals the essence of animals, and so forth. While Aristotle's prescriptions may be somewhat idealized, they do have one clear and relevant consequence: each science is the science it is in virtue of its object of study. Sciences are individuated by their domains. Biology is biology rather than physical geography because it studies living things rather than the features of the earth. It follows, then, that if there is a science of being, or of being *qua* being, its object should be being, or being insofar as it is being.

What, then, is the genus of being? Or of being *qua* being? The answer, we may think, should be obvious: all the beings there are, or all the beings there are insofar as they are beings and in no other way. Aristotle encourages just this response in his announcement of the science of being *qua* being, which he expressly contrasts with the special sciences such as mathematics. These, he says, "cut off some part of being and consider what coincides with it" (*Metaph.* Γ.1, 1003a24). The obvious implication seems to be that being *qua* being does not cut off any part of being, but instead studies being in its totality. So, the genus of being, or of being *qua* being is simply all of being, or, thinking extensionally, all the beings there are.

Unfortunately, Aristotle's actual practice in the chapters of the *Metaphysics* after his introduction of the science of being *qua* being seems to head in a completely different direction. In these chapters, Aristotle turns to a highly focused and intricate discussion of just one category of being, namely substance (*ousia*), and sometimes seems even to suggest that metaphysics studies ultimately just one rather special substance, namely the unmoved mover. So, we have what we may call the *Extension Problem*. If first philosophy is perfectly general, then it cannot focus exclusively on one category of being, substance, and still less on just one instance of that kind, the divine substance, no matter how elevated it may be. For if it does focus exclusively on one category of being, or one member of one category of being, then being *qua* being evidently cuts off some part of being, while setting aside the rest of being, just as the special sciences do. It does not immediately help matters that Aristotle seems perfectly aware of his procedure in this regard and is not in the least nonplussed:

> Indeed, what was sought of old and is sought at present and always, and what is always a matter of difficulty, namely *what is being*? (*ti to on*) is this: *what is substance*? (*tis hē ousia*).
>
> (*Metaph.* Z.1, 1028b2–4)

Here, in the space of one sentence, Aristotle seems to refashion his general science of being *qua* being into a science of substance. This is why, in brief, we are confronted with our Extension Problem.

We can begin to make some preliminary progress with regard to this problem if we focus minutely on the way in which Aristotle characterizes the special sciences when he contrasts them with first philosophy. He says not only that the special sciences "cut off" part of being, but that they study what "coincides with being," rather than being itself. This recalls a point we have already encountered when considering the sophistic case of Socrates and Socrates-seated, but did not then emphasize: Aristotle there notes that Socrates-seated and Socrates merely coincide, or, more precisely, that Socrates-seated is a *coincident* of Socrates. (Here, perhaps, a quirk of English should be mentioned: Socra-

tes and Socrates-seated do not meet coincidentally, in the sense of just happening upon one another by chance, but rather coincide in the sense of overlapping, as in the case when our plans for the weekend coincide because we have agreed to meet in Austria to ski together.) So, when contrasting first philosophy with the special sciences, Aristotle implies that being *qua* being does not look into what overlaps with being, but into being itself. *Everything* coincides with being, while it is not the case that everything coincides with mathematical beings, or beings capable of motion, or living beings. The suggestion is thus that being *qua* being studies what it is with which anything whatsoever must coincide: being itself.

This points us in the general direction of a solution to the Extension Problem, but no more. After all, one may rightly observe, not everything is a substance; indeed, one might infer, not everything coincides with substance. Aristotle recognizes, for example, the categories of quantity and of place. Yet non-substances might have quantities (does not Socrates-seated weigh something?) and places seem at times bereft of substances. Is the Agora not still a place when no substances are present in it? So, one might conclude, whatever the facts of coinciding might be, the thought that being *qua* being studies being and not what merely coincides with being does not yet resolve our problem.

Still, it does point in the direction of a solution, but a solution which requires first the statement of a second, allied problem. Aristotle claims that first philosophy "studies being *qua* being (*to on hē(i) on*), and the attributes belonging to it in its own right (*kath' hauto*)" (*Metaph*. Γ.1, 1003a21–22). Whatever its extension, one might wonder what belongs to being *qua* being *in its own right* (*kath' hauto*). If we again advert to Aristotle's paradigm of science in the *Posterior Analytics*, then the situation becomes reasonably clear, at least for the special sciences (*An. post*. 1.4, 73a34–b5). To study what belongs to, for instance, human beings in their own right, according to Aristotle, is to study human beings by determining their *essential properties*, those properties without which human beings would not exist, and which are explanatorily basic to them, in the sense that they explain in an asymmetric way other features human beings may have, whether necessarily or accidentally. His first thought, then, is that what is predicated in its own right is something predicated as follows:

- Φ is predicated in its own right (*kath' hauto*) of x *iff* (i) Φ is predicated of x; and (ii) Φ's account must be mentioned in an (essence-specifying) account of x.

Thus, supposing that human beings are essentially rational, it follows that they could not exist without being rational; it also follows that we should expect to explain other deeply human traits such as *being capable of grammar* in terms of rationality and not the other way around.

By parity of reasoning, then, we should expect the science of being *qua* being to investigate the attributes that are essential to being, those features without which no being could be a being, and then also to explain other features of being in terms of these essential features in an asymmetric way. Herein, though, lies a second problem, namely the *Intension Problem*: which are the essential features of being, and which its non-essential features? To begin, it seems that being *qua* being, unlike, say, a human being, is somehow simple. Being itself seems to lack the requisite internal complexity for being studied in a scientific way. Whereas human beings are manifestly complex, because they are such as to evince both essential and accidental features, being as such seems to have no accidental features. Indeed, it is hard to see what its essential features might

be, especially if we are adopting Aristotle's sort of essentialism. (For a contrast between Aristotelian and other forms of essentialism, see Shields 2007: §3.2.)

Even if one accepts this observation, it need not cripple our attempt to address the Intension Problem. For in the *Posterior Analytics* Aristotle distinguishes a second sort of predication in its own right (*kath' hauto*). He also notes that one might speak of such predication in a completely different sort of way, as when one predicates being odd of a number (*An. post.* 1.4, 73a34–b5). On the one hand, *number* is not essentially odd, since many numbers (well an infinity of them) are not odd at all. Still, when oddness is predicated of a number which is in fact odd, this is hardly accidental to that number. This leads to another sort of *kath' hauto* predication:

- Φ is predicated *kath' hauto* of x *iff* (a) Φ is predicated of x; and (b) x's account must be mentioned in an (essence-specifying) account of Φ.

Aristotle is here thinking of a role in science for a kind of predication that, so to speak, runs in the opposite direction of the first form of predication in its own right (*kath' hauto*). Thus, to say that oddness is predicated of the number three, one is at some point going to have to specify that, necessarily, oddness is the sort of thing which only numbers can manifest; consequently, it will not be possible to characterize this predicate without specifying that it is restricted to the kinds of subject of which it is currently being predicated.

This second sort of predication in its own right (*kath' hauto*) offers us some latitude in our approach to the Intension Problem. For now, instead of being constrained to specify what is essential to being *qua* being, we may instead be thinking of our science as studying all beings as beings, noting that all beings—of whatever category—will be such that whatever pertains to being as such will equally pertain to them. So, when he says that first philosophy "studies being *qua* being (*to on hē(i) on*), and the attributes belonging to it in its own right (*kath' hauto*)" (*Metaph.* Γ.1, 1003a21–22), Aristotle is contending that the metaphysician should investigate precisely those features that all beings have, as beings, whatever else they may be. This is just to say, however, that first philosophy studies all beings, while setting aside those features coinciding with their being beings, and leaving those matters to be investigated by the special sciences. These would be, for instance, features such as *being an animal*, studied by the zoologist, being a number, studied by the mathematician, and being capable of motion, studied by the physicist. Each of these features specifies a unified domain, and so also specifies a science (*epistēmē*); these sciences cut off some part of being, focusing on features which coincide with being, but without reflecting on what pertains to being in its own right (*kath' hauto*).

On this approach to the Intension Problem, the science of being *qua* being has before it a fairly clear task: to ascertain those features which all beings, as beings, have in their own right (*kath' hauto*)—where this is understood to include all features, of any kind, something must manifest if it is to be a being, or, in Aristotle's idiom, if it is to coincide with being in so far as it is being.

We have stated and investigated the Intension Problem only this far, because at present we are subordinating it to the Extension Problem, namely the problem of how Aristotle can understand himself to execute the science of being *qua* being by asking and answering a question which evidently pertains to only part of being, namely: what is substance (*tis hē ousia*; *Metaph.* Z.1, 1028b3–4)?

The answer is two-fold. First, in fact, he does *not* pursue only the question of the

nature of substance in his *Metaphysics*. On the contrary, he also, even before turning to substance, investigates the most general principle of all being, namely the principle of non-contradiction (*Metaph*. Γ.4).

He equally investigates two other features fundamental to all being, which he yokes together in an instructive passage from the beginning of *Metaphysics* E.1.

> Since being (*to on*) is said in one way with reference to what something is, or some quality or quantity, and in another way with respect to potentiality and actuality (*entelecheia*) and with respect to function, let us make determinations about potentiality and actuality—first about potentiality most properly so called, even though this is not the most useful for what we want now.
>
> (*Metaph*. E.1, 1045b32–1046a1)

The two features here yoked pertain to all beings, of any sort, namely *being categorially delineated* and *being modally enmeshed*. By this is meant that all beings are such that: (i) they are beings in some category or other; and (ii) they are actual or potential beings. So, it falls to the first philosopher to investigate all three of these features, namely, being *logically circumscribed* (that is, being subject to the principle of non-contradiction), *being categorially delineated*, and *being modally enmeshed*. When we read much of the work that has come down to us under the title of the *Metaphysics*, this is precisely the sort of investigation we find Aristotle conducting. (For a fuller characterization of these features of Aristotelian metaphysics, see Shields 2012.)

V Conclusions

We will be disappointed if we open Aristotle's *Metaphysics* expecting to discover his stance on the issues of primary concern to metaphysics as that discipline is practiced today. We simply do not encounter a text that is readily recognizable as engaging in the same sort of enterprise; if nothing else, Aristotle's idiom and vocabulary will strike an untutored present-day reader as alien. More importantly, though, metaphysics has moved on from its origin as ontology, a science dedicated to the study of being. Today it is a discipline embracing ontology as but one sub-discipline among others, many of which must be regarded as discrete, departmental sciences from the standpoint of first philosophy. Aristotle's preoccupations in the work that came to be called the *Metaphysics* concern problems about being itself—general problems, formulated at a very high level of abstraction.

If in view of their being abstract they are obscure at first, these puzzles of being do finally force themselves into view. Anyone reflecting adequately on the peculiarities pursuant to our normal experiences of change and generation, contends Aristotle, cannot finally escape the problems of metaphysics. Inevitably, then, puzzles of being command the attention of the most acute scientist, the inquirer whose love of wisdom leads last to the inquiry of what is first: the science of being *qua* being.

References and further reading

Aubenque, P. (1962) *Le problème de l'être chez Aristote*, Paris: Presses Universitaires de France.

Brentano, F. (1975) *On the Several Senses of Being in Aristotle*, ed. and trans. R. George, Berkeley, CA: University of California Press.

Chroust, A.-H. (1961) "The Origin of 'Metaphysics'," *Review of Metaphysics* 14: 601–616.
Code, Alan, (1996) "Owen on the Development of Aristotle's Metaphysics," in W. Wians (ed.) *Aristotle's Philosophical Development: Problems and Prospects* Lanham: Rowman & Littlefield: 303–325.
—— (1997) "Aristotle's Metaphysics as a Science of Principles," *Revue Internationale de* Philosophie 51: 357–378.
Guthrie, W. K. C. (1981) *A History of Greek Philosophy Volume VI: Aristotle: An Encounter*, Cambridge: Cambridge University Press.
Jaeger, W. (1948) *Aristotle: Fundamentals of the History of his Development*, trans. R. Robinson, 2nd edn., Oxford: Clarendon Press. (Originally, *Aristoteles: Grundlegung einer Geschichte seiner Entwicklung* (Berlin: 1923).)
Loux, M. (1973) "Aristotle on the Transcendentals," *Phronesis* 18: 225–239.
Mansion, A. (1958) "Philosophie première, philosophie seconde et metaphysique chez Aristote," *Revue philosophique de Louvain* 56: 165–221.
Mansion, S. (1976) *Le jugement d'existence chez Aristote*, 2nd edn., Louvain: Editions de l'Institut superieur de Philosophie.
Matthews, G. B. (1982), "Accidental Unities," in M. Schofield and M. Nussbaum (eds.) *Language and Logos*, Cambridge: Cambridge University Press: 223–240.
Merlan, P. (1968) "On the Terms 'Metaphysics' and 'Being-qua-Being'," *Monist* 52: 174–194.
Moraux, P. (1951) *Les listes anciennes des ouvrages d'Aristote*, Louvain: Editions Universitaires.
Moreau, Joseph (1977) "Remarques sur L'Ontologie Aristotelicienne," *Revue Philosophique de Louvain* 75: 577–611.
Owen, G. E. L. (1960) "Logic and Metaphysics in Some Early Works of Aristotle," in I. Düring and G. E. L. Owen (eds.) *Aristotle and Plato in the Mid-Fourth Century*, Gothenburg: Almqvist and Wiskell: 163–190; reprinted in M. Nussbaum, ed., *Logic, Science, and Dialectic*, Ithaca, Cornell University Press.
Owens, Joseph, (1978) *The Doctrine of Being in Aristotle's Metaphysics*, 3rd edn., Toronto: Pontifical Institute of Medieval Studies.
Patzig, G. (1960) "Theologie und Ontologie in der 'Metaphysik' des Aristoteles," *Kant-Studien* 52: 185–205; trans. by J. and J. Barnes as "Theology and Ontology in Aristotle's *Metaphysics*," in J. Barnes, M. Schofiled, and R. Sorabji (eds.) (1979) *Articles on Aristotle* vol. 3, London: Duckworth: 33–49.
Shields, Christopher (1999) *Order in Multiplicity: Homonymy in the Philosophy of Aristotle*, Oxford: Oxford University Press.
—— (2007) *Aristotle*, London: Routledge.
—— (2009) "An Approach to Aristotelian Actuality," in P. Hacker and J. Cottingham (eds.) *Mind, Method and Morality: Essays in Honour of Anthony Kenny*, Oxford: Oxford University Press: 68–93.
—— (2012) "Being *qua* Being," in C. Shields (ed.) *The Oxford Handbook of Aristotle*, Oxford: Oxford University Press: 343–371.
Wedin, Michael, (2009) "The Science and Axioms of Being," in G. Anagnostopoulos (ed.) *A Companion to Aristotle*, Oxford: Blackwell: 125–143.

Related chapters

15. Plato's metaphysics
19. Aristotle: logic
20. Understanding, knowledge, and inquiry in Aristotle
21. Aristotle: psychology
22. Aristotle's philosophy of nature

24
ARISTOTLE ON THE GOOD LIFE

Dominic Scott

This chapter will examine the account Aristotle gives of the good life the *Nicomachean Ethics*. The word "Nicomachean" may indicate that the work was a set of lecture notes worked into a treatise by his son Nicomachus. We also have another treatise, the *Eudemian Ethics*, so-called because its editor may have been his pupil, Eudemus. There has been plenty of discussion about the differences and inter-relations between the two treatises, and many scholars think that the *Eudemian Ethics* is an earlier and less mature work. Whatever its merits, I shall focus upon the more widely known of the two, the *Nicomachean Ethics*.

1 The main theme: what is *eudaimonia*?

Aristotle embarks upon his investigation into the human good from the very start of the work. Everyone, he says, identifies it with *eudaimonia* (usually translated as "happiness"), but acknowledges that there is widespread disagreement over its definition. One thing of which we can be confident is that it is the ultimate goal of all our choices and activities: we would never pursue it for the sake of something else; rather, we pursue everything else for its sake. In the same chapter as he makes this very general point (*Nicomachean Ethics* 1.7), he goes on to give a more determinate account of the human good by identifying what is characteristic of human beings—our "function" (*ergon*). His underlying assumption in this passage (which has become known as "the function argument") is that the human good must consist in the perfection of whatever is distinctive of human nature. This he claims to be reason, and so he defines *eudaimonia* as some sort of activity involving reason. But it is not enough just to exercise one's rational powers; one must do so successfully: otherwise one might live a distinctively human life, but without attaining the human *good*. So *eudaimonia* involves activity of the rational soul in accordance with "excellence." The Greek word for this is *aretē*, usually translated in this context as "virtue."

Like Plato, Aristotle thought that the human soul can be divided into different parts and distinguishes it into rational and non-rational elements (1.13). There is a part of us that can deliberate, think and plan ahead. But we also have emotions and appetites. Sometimes these seem to act against reason, as in the phenomenon of weakness of will or incontinence (*akrasia*), where a person acts against their better judgment. But feelings can also respond to reason: for instance, we can moderate our anger in the light of

reflection. Because the emotions and appetites can "obey" reason in this way (rather as a child can obey a parent), they can be called rational in a qualified sense (that is, "reason responsive"). This has a crucial implication for Aristotle's account of *eudaimonia*. Rational activity covers not just thinking, but feeling as well. To take the case of anger again: making an assessment of a situation (for example, about who is at fault and to what extent), feeling a degree of anger that corresponds to this assessment and acting upon it—all these are involved in "rational activity."

This example assumes that there is a correct assessment of a situation, a correct judgment to be made about subsequent action, and a correct level of emotion to be felt. This is where the concept of "virtue" enters into the theory. Each part of the soul, reason and the passions, is capable of its own type of virtue or excellence, and of falling short of this standard: in thinking or deliberating, such virtue consists in hitting the truth (for example, reason must *accurately* determine which dangers are worth standing up against). Where the reason responsive part is concerned, there is another kind of virtue, which consists in having the *right* degree of some feeling (for example, fear in the case of courage) and acting in the *right* way (for example, standing fast and fighting in battle).

The kind of virtue associated with the rational part of the soul is called "intellectual" virtue; that associated with the reason-responsive part is called "moral virtue" or "virtue of character" (*ēthikē aretē*), and it takes up a great deal of Aristotle's attention, mainly in books 2 to 5. Because there are obviously many different passions and types of action, there will be several moral virtues: for instance, temperance is associated with the appetite for physical pleasure and courage with fear. In book 4 Aristotle describes several more virtues along these lines, such as the virtue of patience or "mildness" (as it is sometimes translated), which is concerned with anger. He also discusses generosity, magnanimity, friendliness, and wit. Justice, which is primarily concerned with the fair distribution of goods, occupies the whole of book 5. In describing the moral virtues throughout these chapters, Aristotle propounds his celebrated "doctrine of the mean." Each moral virtue involves feeling or acting in the appropriate way. Aristotle insists, time and time again, that the appropriate way is to be understood as a point lying between two extremes. The courageous person avoids too much fear (which would make him cowardly), but also too little (which would make him rash). In the same way, the generous person stands between being stingy and extravagant, the mild between being irascible and supine.

So a life of *eudaimonia* will involve activity in accordance with a wide range of virtues. Note the importance of activity for Aristotle: it is not enough just to have a virtue (you can be courageous or generous while being asleep). You need to put the virtues into action. This will involve the correct decisions, feelings and actions across a very wide range of human situations: in respect of one's own bodily health, in warfare, in dealings with one's friends and family, and in the life of the city, perhaps as a member of a political assembly or law-court.

Within the class of intellectual virtue, Aristotle distinguishes two broad kinds: practical and theoretical. We have already alluded to the virtue of practical reason when talking of the ability to make correct decisions in respect of actions and emotions. But Aristotle, as much as anyone, was interested in the kind of theoretical reasoning involved in natural science, mathematics, as well as theology and metaphysics. In the *Nicomachean Ethics* he insists that the capacity for theoretical thought is quite distinct from practical reason. But human beings are capable of both, so that activity of the rational soul—and hence *eudaimonia*—ought to involve theoretical as well as practical

reasoning. He draws the general distinction between practical and theoretical intellectual virtues in book 6, as well as making further sub-divisions between different intellectual virtues, both practical and theoretical. In the final book of the work, he returns to the distinction between practical and theoretical reason, and goes to some lengths to stress the importance of theoretical contemplation in the best life. In fact, he talks of it as in some sense divine—something in which the gods engage and of which we are capable too, albeit to a limited degree.

For the sake of clarity, it may help to characterize Aristotle's procedure in the following way: having started in book 1 with the most general formulation of the human good (for example, that it is the final goal, never sought for the sake of anything else), he then proceeds to define it with increasing specificity: it is (or centrally involves) rational activity in accordance with virtue (1.7); virtue divides into two kinds, moral and intellectual (1.13); the moral virtues form a large group, ranging from courage to justice (the point is first made in 2.7–9, but then developed, case by case, from the second half of book 3 to the end of book 5); he follows the same procedure for the intellectual virtues, defining the nature of each and differentiating them from one another in book 6. He interrupts his account of *eudaimonia* at this point to discuss related topics, and only returns to the central task in 10.6–8, where he concludes his account of the human good. By this point, at the culmination of the work, it has become clear that there are really two aspects to the good life: the development of our practical nature, in which reason moulds emotion and guides action, and the development of our divine nature, by which we engage in theoretical contemplation.

2 Subsidiary topics

Let us now look at some of the discussions that accompany (or interrupt) the main theme. By far the longest of these is the discussion of friendship, which takes up all of books 8 and 9, approximately one fifth of the work. That Aristotle should attach such importance to the topic is not surprising. In the very opening of book 8, he comments that a life without friendship could never be a happy one, and his analysis of *eudaimonia* so far in the work has stressed its social and political nature. The discussion of friendship is perhaps most notable for the distinction he makes between three kinds: the best kind of friendship obtains between two people of virtuous character. They like (or love) each other because of their good character; for this reason they can be said to like each other for their own sakes—for whom they really are. By contrast, some people are only friends because of the usefulness that such an association can bring (for example, business partners) or because of the pleasure they give each other. In these two kinds of friendship, utility and pleasure friendship, the object of affection is not the other person in their own right, but some contingent feature they have, for example, business connections or physical beauty; once this disappears, as can easily happen, the friendship withers as well. Virtue friendship is thus the most enduring.

Other important (though subsidiary) topics include (in order of their appearance): the role of fortune in securing *eudaimonia* (1.9–11), moral education (2.1–4 and 10.9), responsibility and related matters in moral psychology (3.1–5), morally defective states of character (7.1–10), and the nature and value of pleasure (7.11–14 and 10.1–5). Aristotle presents pioneering treatments of all these topics. We shall refer to his views on fortune and *eudaimonia* below. In his account of moral education, he tends to downplay the role of intellectual instruction, stressing instead the importance of practice or

"habituation" in the acquisition of virtue. By this he means the process of repeatedly performing the acts that a virtuous person would perform, even if one does not yet have the virtuous character. For instance, to acquire the virtue of temperance, one needs to abstain from pleasures repeatedly, even if this initially goes against the grain. As a result, such behavior will start to become "second nature." Habituation will develop a sense of the intrinsic value of acting virtuously: one will come to see that a virtuous action is fine or noble (*kalon*), and become a "lover of the noble." He also thinks that the converse holds true—that a person forms a bad character by repeated actions of a certain kind—for example, by continually yielding to physical pleasure one tends to become intemperate.

His account of responsibility, probably driven by an interest in legal questions, considers the relevance of such factors as ignorance and duress in our assessment as to whether to hold agents blameworthy. He also raises the interesting question of whether we can be held responsible for our characters, as well as particular acts. One might think that a person who is, by their very disposition, cowardly or mean cannot behave otherwise. But given that a character is formed by repeated acts (as his account of habituation made clear), he argues that we can be held responsible for the character we have come to form, on the grounds that we were responsible for the individual acts that helped form our character.

After the long account of the moral and intellectual virtues in books 3–6, Aristotle turns to defective states of character in book 7. By this point we are already familiar with his conception of vice through the doctrine of the mean. For every virtue, there are two corresponding vices. But in the first half of book 7 he gives a more extensive account of what can go wrong in human character. A vicious person is someone who characteristically experiences too much or too little of one sort of feeling. The intemperate person, for instance, feels too much desire for physical pleasure and acts accordingly. There is, however, a symmetry between the vicious and the virtuous: both approve of their own choices and lifestyles. The vicious person thinks it is right to feel such strong appetites and indulge them. But there are other types of character in between the vicious and the virtuous: some people experience strong appetites, but think they are wrong to do so and wrong to act on them. Those who refrain from indulging their appetites are continent (encratic); those who indulge them (and later feel regret) are incontinent (acratic). Aristotle realizes that, in recognizing the existence of incontinence, he is taking a stance against Socrates, and spends a long and difficult chapter discussing the sense in which someone who knows something is wrong can nonetheless go ahead and do it (7.3).

Finally, there is the topic of pleasure. This appears in two different places in the work (7.11–14 and 10.1–5), and the fact that we have separate (and not always compatible) discussions of the topic is probably the result of editorial mishap. But the topic is clearly of great importance to Aristotle. For one thing, because pleasure is the most important motivating factor in most people's lives, any student of the human good needs to come to grips with it. Also, some thinkers had already identified it with *eudaimonia*, and so Aristotle spends some time discussing arguments against such hedonists. Although he rejects their views, he does give pleasure a very significant place in his account of *eudaimonia*. The truly virtuous person enjoys performing good actions and, unlike the encratic, experiences no unpleasant feelings of conflict. So pleasure "supervenes" upon virtuous actions. It is not the goal at which the virtuous person aims, but it does come as an added bonus, as it were (cf. 10.5, 1174b31–3). So, while the hedonist is wrong

actually to identify pleasure and *eudaimonia*, we should not go to the other extreme and disassociate the two entirely.

3 The intended audience

An important feature of the *Nicomachean Ethics* is the restriction that Aristotle places on the membership of his audience. At certain points he states that anyone who is to benefit from rational argument in practical matters should already have been brought up in the right habits. They must be "lovers of the noble" (10.9, 1179b9 and 30). This means that they should already acknowledge certain kinds of action as noble and aspire to them as such. The main purpose of the work is in fact to give his audience a more determinate account of the human good than they already possess based on the moral intuitions acquired through their upbringing. For many scholars, this marks a significant departure from his predecessors, Socrates and Plato. In some dialogues, Plato presents Socrates as prepared to argue with anyone, whatever their moral presuppositions. Indeed, to judge from his encounters with Callicles and Thrasymachus, in the *Gorgias* and *Republic* 1 respectively, he is particularly keen to engage with those who reject the value of justice. In the *Nicomachean Ethics*, however, Aristotle does not attempt to bring the "immoralist" in from the cold, and does not see that as a worthwhile project in ethics. This has important implications for how we approach the *Nicomachean Ethics*: it puts constraints on the sorts of arguments we should expect to find and of the kinds of challenge we can legitimately expect to find answered in the work. In particular, we should be very wary of expecting him to answer the question, "Why be just?" at least as posed in the *Gorgias* or the *Republic*.

There are, however, other restrictions that Aristotle puts on his audience. He is not lecturing to young people, partly because they lack experience of life. In fact, his primary audience is a group of people who are seeking to realize the good within the context of a *polis*—to promote *eudaimonia* among their citizens (cf. 1.2, where he describes his subject matter as belonging to "political science"). Obviously, such people need a reasonably determinate account of what they are trying to promote—hence the main purpose of the work. It is most probable that he is talking to a group of would-be legislators, who will one day be charged with establishing or modifying the constitution, making or amending laws, and in particular establishing educational practices. Such an audience, perhaps, would be in early middle age.

Again, this has implications for how we read the work. For one thing, it should be seen as the first stage in a broader work of politics, the later stages of which would get down to more details about the merits of different constitutions and legislation (cf. 10.9, 1181b15–23). (Aristotle's *Politics* seems to fit this bill, although there are some discontinuities between it and the *Nicomachean Ethics*, some of them quite significant.) The fact that the work is intended for potential legislators operating within practical constraints also affects the kinds of method Aristotle himself pursues in the work, as we shall see in the next section.

4 The human function and the basis of Aristotle's theory

The argument of the *Nicomachean Ethics* is built upon the function argument of 1.7. This brings out a crucial feature of Aristotle's ethical theory: it is based upon a form of natural teleology. He thinks that, like any species, human beings have a naturally given

end (*telos*), and the good of a species lies in fulfilling it. To say that the end is natural is not to say that we instinctively desire it. The life of activity in accordance with virtue is something we ought to aim at, whether or not we actually do. In saying that there is a natural *telos* in this way, Aristotle is in agreement with most of the other main schools of ethical thought in antiquity, especially Plato and the Stoics. We shall look at some of the differences between Aristotle and these philosophers below. But first I wish to consider how the *Nicomachean Ethics*, in so far as it assumes natural teleology, relates to Aristotelian philosophy more generally.

It is easy to find connections between the basic underpinning of his ethics and other parts of his philosophy. In *Physics* 2, he defends the thesis that each organism has a goal (*telos*), what he calls its final cause, and that most of its material organs are there for the sake of attaining this goal. For each organism, this will consist in a certain way of life or flourishing. He argues against thinkers like Empedocles or Democritus who claimed that the material parts came into being purely as a result of mechanical processes. On their view, the fact that an organism has certain abilities (for example, perception, locomotion or thought) is a mere by-product of material processes. Aristotle argues that this is the wrong way round: rather, the material parts are only there *because* there is a naturally given *telos* for each organism. To put the central thesis of the *Nicomachean Ethics* in these terms: the final cause for humans is activity of the rational soul in accordance with virtue. This is what our material parts are for, and what our development—physical, moral, and intellectual—should be aimed at. In a sense, therefore, the *Nicomachean Ethics* is continuous with Aristotle's natural philosophy; one could say that he has a biological conception of ethics: just as a plant is geared up towards a specific kind of flourishing, so human beings are naturally orientated towards the life of virtue, moral, and intellectual.

The function argument can also be viewed from the perspective of Aristotle's *Metaphysics*. The idea of a human function is to be understood in terms of what it is that defines the human being: function is thus very closely related to the Aristotelian notions of essence and form. In the *Metaphysics*, particularly book Γ, he defends the claim that there are essences, and in later books of the work explores the concept of essence further and discusses its relation to the other central concepts of metaphysics: substance, matter, universals, potentiality, and actuality. The *Metaphysics*, in other words, explores in considerable depth some of the notions that underlie the basic argument of the *Nicomachean Ethics*.

Yet another work that can be related to the *Nicomachean Ethics* is the *De anima*, in which Aristotle defines the soul as the form of an organism, whose matter is the body. The soul consists in a number of abilities, for example, to move, desire, perceive, imagine, and think. For the matter to have these abilities is to be alive; but these abilities are taken to a further level of fulfillment whenever one actually perceives or thinks. The *Nicomachean Ethics* argues that a distinctively human life involves the actualization of some of these abilities, that is, those concerned with certain types of desire and reason. (Abilities such as nutrition and perception, being common to other animals, cannot be components of *eudaimonia*.)

I mention these other themes in order to show that, broadly speaking, Aristotle's ethics and politics cohere with the rest of his philosophy. But the point also raises an important methodological issue about how to approach the *Nicomachean Ethics*. It has to be said that the function argument of *Nicomachean Ethics* 1.7 is somewhat brief: Aristotle begins by asserting that humans have functions, and then pauses to justify the claim. But he gives us only two quick arguments: (i) since we talk of, for example,

carpenters and flautists having functions, we ought to think that a human being as such has a function; (ii) since the parts of a human, for example, eyes and hands, have functions, a human being as a whole ought to have a function. Not surprisingly, many readers have found these unsatisfactory, and one may well ask why Aristotle did not provide stronger and lengthier arguments in this passage. Perhaps the reason is that he expected the audience to look back to his other treatises, especially the *Physics* and *Metaphysics*, to provide more rigorous support for his conclusions. The methodological upshot of this would be that we should approach the *Nicomachean Ethics* as a later volume in a series of works that develop a philosophical system from metaphysical and psychological first principles.

Tempting as this view is, there is a more plausible alternative. As we saw above, the *Nicomachean Ethics* is directed at an audience of practically minded people, intent on engaging in politics. There are a number of warnings in the first book against demanding too much precision in political science (cf. 1.6, 1096b30–31 and 1.13, 1102a25–6). At the end of 1.7 (1098a29–33), he makes the following analogy: both a carpenter and a geometer think about right angles; but the former does so for practical purposes, the latter merely for the sake of knowledge. The carpenter does not have to delve too deeply into the truth of the matter. The student of political science is in an analogous position. Despite many opportunities to do so, Aristotle does not often make explicit use of his other treatises, even though we might think they would have given him more support. Perhaps he thought that, for practical purposes, the sketchy arguments that we find (for instance) in 1.7 were perfectly adequate. In methodological terms, this means that Aristotle never envisaged some sort of grand project, whose first principles lie in the metaphysical works and which reaches the practical treatises by some form of deduction from these starting-points. Of course, if one's interest in ethics or politics is mainly theoretical, one will find this approach unsatisfactory. But Aristotle insists that we study the subject not for the sake of knowledge, but action (10.9, 1179a33–b4). As the moral equivalent of the carpenter in his analogy, it would be counter-productive for a student of political science to aspire to the theoretical rigor found in some of his other treatises.

I stress that my interpretation is somewhat controversial. Also, I should add two points of clarification. First, I am not asserting that the conclusions of the *Nicomachean Ethics* are incompatible with Aristotle's views as found elsewhere (though there may be discrepancies here and there). Far from it; and he could doubtless have written a treatise in which he brought out the interconnections between these different areas of his work. But, as I have indicated, such a project would have had a reflective rather than a practical function. Second, I do not wish to deny that Aristotle from time to time refers to conclusions from his other works at later points in the *Nicomachean Ethics* to elaborate his theory. This is indeed what happens in book 6 (1139b27 and 32, where he refers to the epistemology of the *Posterior Analytics*) and perhaps also in 10.7–8 where, as we shall see below, the *De anima* could plausibly be said to be in the background. But this is different from seeing the starting-points of the *Nicomachean Ethics* as being systematically deduced from the conclusions of other works.

5 The doctrine of the mean and the value of the emotions

The doctrine of the mean is fundamental to his account of the moral virtues: his discussion is structured around the three-fold division between a virtue as a mean and its two

vices, one of excess and one of deficiency. As he goes through the individual virtues, he is always at pains to vindicate the doctrine. There is a great deal to be said about the doctrine, but here I wish to focus on one particularly important feature. Often we think of a virtue being opposed to just one vice: courage, for example, to cowardice. But the doctrine is meant to remind us that there is almost always another vice—rashness as well as cowardice, or extravagance as well as stinginess. (In Book 5 justice is an exception to this rule: there is only one vice opposed to justice, namely the disposition to take more than one's fair share, which we call injustice. He does not think that the opposite disposition, to take too little, actually constitutes a vice.) This means that, where appetites and emotions are concerned, he thinks we can go wrong not just by feeling them to excess, but also by not feeling enough of them.

The implication of this is that there is no emotion that we should never feel on any occasion. This should be connected to his teleology. Nature has given us the capacity to feel a wide range of emotions, and to align them with our practical judgments. A fully flourishing human life must involve making use of the potential that nature has given us. Thus all emotions have their place in the ideally good life. Aristotle therefore rejects the view that emotions are just inevitable outcomes of our human condition, with no value in and of themselves; even more emphatically, he would reject the Stoic view that it is wrong and irrational to feel emotion. Take the case of anger. For the Stoics, the virtuous person will sometimes judge that others have acted unjustly and may seek to take the appropriate action. But he will not feel any anger about this. For Aristotle, on the other hand, it can be virtuous to feel anger and actually vicious to feel no anger at all. Similarly, the virtuous agent will feel fear in certain situations of danger. Again, that they feel physical pleasure is not merely an unavoidable feature of embodiment, as some ascetics might think, but something of more positive value. In fact, not to feel physical appetites for food and sex would be a fault.

6 The role of external goods

While we are on the subject of the differences between Aristotelian and Stoic ethics, we should say something about the role of "external goods." These are goods external to the soul, such as health, or even to the body, such as wealth. Friendship and honor also fall under this heading. What is the role of such goods in *eudaimonia*? There are two different answers to this question, depending on one's interpretation of the *Nicomachean Ethics*. The first is that such goods are intrinsically valuable components of *eudaimonia*. One way to understand this point is to see *eudaimonia* as a whole consisting of several parts, like a cake that has several different ingredients. These include virtuous activities, but on one interpretation Aristotle also thinks that friendship, honor, and pleasure are good in themselves, and hence core parts of the happy life.

A second way in which external goods can enter into the life of *eudaimonia* is as means to and opportunities for virtuous activity. Remember that *eudaimonia* does not just require that one has the virtues; one must put them into practice, by which Aristotle means that one must actually go out and perform virtuous actions, for example, in the social and political arena, or on the battlefield. (This ties in with the function argument and Aristotle's teleology more generally. Merely having a virtue is akin to a potentiality; our ultimate aim must be actuality.) In most cases, such activity requires certain external conditions to be met: you cannot act generously without money and friends, or justly without political or judicial power. So the life of *eudaimonia* is impos-

sible to achieve without some measure of external goods. To this extent, it is vulnerable to changes in fortune, as Aristotle acknowledges in his discussion of fortune book 1.9–11. The difference between this account of the value of external goods and the first can be expressed with the same analogy as before: instead of comparing external goods to the ingredients of the cake, we should consider them analogous to the utensils required to make it.

Some scholars think he held both views about the value of externals, others only the second. But on either view, his account of *eudaimonia* is very different from the theory that the Stoics went on to develop. For them, the mere possession of virtue is sufficient for a happy life. Or, if it is not enough just to possess virtue (which is compatible with being asleep), one needs to actualize one's virtue only to the extent of making the right judgments about one's circumstances and having the right attitudes to them. On such a view a virtuous person would still be happy even if he were being tortured on the rack. Aristotle was already familiar with this paradoxical claim and dismissed it with contempt in *Nicomachean Ethics* 1.5. For him, anyone under such duress, anyone imprisoned or seriously ill, would be impeded from exercising virtue in the appropriate way. This line of thought can also be used to distinguish Aristotle from Socrates, who seemed to have thought virtue sufficient for *eudaimonia*.

7 The intellectual virtues

One point Aristotle makes emphatically is that there is a fundamental difference between two kinds of reason: theoretical and practical. Theoretical reasoning covers disciplines such as mathematics, astronomy, metaphysics, and theology. In all such disciplines, we need to discover the first principles or axioms and then, by valid deduction, infer a large number of general propositions. In *Nicomachean Ethics* 6.3–7, he distinguishes cognition of principles (*nous*) from cognition of the propositions derived from them (*epistēmē*), and calls the combination of the two "wisdom" (*sophia*). (Like Plato, Aristotle sometimes used the achievements of mathematics as a model for other disciplines to follow.) But practical reason is different. Here we are concerned specifically with the human good and, ultimately, with making decisions in the here and now. The virtue of the practical intellect, for which Aristotle uses the word *phronēsis*, will involve some conception of the human good (such as Aristotle himself is attempting to give in the *Nicomachean Ethics*), but, *via* deliberation, will enable an agent to make decisions about action in particular situations. (Translations of the term *phronēsis* vary widely: "practical reason," "intelligence," and "prudence" are among the commonest choices.)

There is an interesting contrast to be drawn with Plato here, at least with the *Republic*. He too was intensely concerned with the possibility of making correct practical judgments, but thought that the ideal way to do this was to acquire philosophical understanding of the most general and abstract kind. For him, practical reasoning was applied theoretical understanding. Not so for Aristotle: theoretical reason exists purely for its own sake; we do not attempt to apply it to the world of practice and so form particular judgments.

Another important point to stress about *phronēsis* is the comparison Aristotle sometimes makes with perception (cf., for example, 6.11, 1143a35–b5 and 1143b11–14). At a number of points in the *Nicomachean Ethics* (and perhaps to the frustration of some of his readers), Aristotle refuses to give detailed advice on practical issues; his task is to give an outline of the human good at a fairly high level of generality

(cf. 1.3, 1094b11–27; 2.2, 1103b34–1104a10; 9.2, 1164b27–30). Correct decisions about detailed matters of practice can be made only by those who actually possess *phronēsis*. But what shape would their reasoning take? In making a decision they would not take a general principle and then attempt to deduce in the light of the actual circumstances what counts as the virtuous action in the particular case at hand. They will indeed have a general conception of the good that they can use to shape their practical decisions, but this does not amount to a process of formal deduction of particulars from universals. Sometimes Aristotle talks of their ability to perceive what it is appropriate to do. This may suggest that they are capable of a special form of moral insight that is not reducible to moral rules and judgments of empirical fact. They probably would not be able to give an exhaustive explanation of what made their action right, any more than in cases of perceptual recognition we can necessarily explain how we came to make the judgments we did. (In seeing that the approaching person from a distance is so-and-so, one doesn't actually operate with a set of rules or decision procedure to determine such judgments. For Aristotle, the same applies to moral judgments.)

We should now consider more closely how *phronēsis* relates to moral virtue. In the last two chapters of Book 6, he makes some interesting remarks about the interdependence of the two. First, one cannot have moral virtue without *phronēsis*. Take the example of courage. True courage requires one to feel the appropriate emotion and act accordingly in situations of danger. But this in turn requires one to have practical knowledge of which causes are worth fighting for; which dangers to be faced and to what extent. Without this knowledge, one may indeed experience a certain degree of emotion, which may lead one to face extraordinary dangers. But such "courage" could easily lapse into rashness and, cut off from *phronēsis*, is merely what Aristotle calls "natural virtue." On the other hand, you cannot have *phronēsis* without moral virtue. If your feelings go to either extreme, they will tend to destabilize your reasoning. Excessive fear, appetite or anger will warp your judgment and lead to serious practical errors. Thus the moral virtues and *phronēsis* go hand in hand together.

Towards the end of 6.13, Aristotle takes this one stage further. Consider what is required for truly virtuous action: in the case of courage, knowledge of what sorts of causes are worth fighting for; in justice, of who is entitled to what; in generosity, of how much money it is appropriate to give a friend. But Aristotle thinks none of this can be compartmentalized. The sort of knowledge involved in distinguishing worthwhile causes from worthless ones is intimately linked to the deliberations of justice; and these in turn to considerations about distributing one's wealth in the private sphere, which is in turn linked to considerations about kindness. In their turn, these will crop up in the kind of knowledge required for the social virtues of friendliness, wit and mildness. So it is not as if *phronēsis* can be fragmented into several distinct specialisms—as many as there are moral virtues. On the contrary, *phronēsis* is a single and synoptic state of mind—one and the same intellectual ability to grasp the human good and how to achieve it in all sorts of situations. This leads to the inseparability of the virtues: as we have just seen, if you have any one moral virtue, for example, courage, you must have *phronēsis*; but if *phronēsis* is a single state and if it in turn requires having moral virtue, it will require having all the moral virtues. This has seemed a strange thesis to hold (you cannot be generous without being courageous), but Aristotle has an interesting (and complex) argument in its favor, which depends on substantive, if controversial, claims about the nature of *phronēsis*.

8 Practical and contemplative conceptions of *eudaimonia*

Finally, we turn to one of the most notorious issues concerning Aristotle's account of the good life. We have seen how he lays the foundations for his account of *eudaimonia* in *Nicomachean Ethics* 1, especially in chapter 7 with the function argument, which talks of the human good in terms of activity of the rational soul in accordance with virtue. As the work proceeds, he seems to fill out this sketch by giving us a more detailed account of each virtue. So, once his survey of all the moral and intellectual virtues is complete at the end of Book 6, we might be expecting him to conclude that *eudaimonia* involves a life of activity in accordance with all the virtues listed in 2–6. After discussing the related topics of deviant character states, pleasure and friendship, he returns in 10.6–8 to finish his account of *eudaimonia*. But in the opening lines of 10.7, we are in for a surprise:

> But if *eudaimonia* consists in activity in accordance with virtue, it is reasonable that it should be activity in accordance with the highest virtue; and this will be the virtue of the best part of us. Whether then this be intellect, or whatever else it be that is thought to rule and lead us by nature, and to have cognizance of what is noble and divine, either as being itself actually divine, or as being relatively the most divine part of us, it is the activity of this part of us in accordance with the virtue that is proper to it that will constitute perfect *eudaimonia*. And it has already been stated that this activity is the activity of contemplation.
>
> (1177a12–18, trans. Rackham 1934, with modifications)

Is he here identifying *eudaimonia* with the activity in accordance with just one virtue, that of theoretical reason? Not surprisingly this passage, along with much of what follows in 10.7–8, has generated a huge amount of perplexity and debate. Before describing some of the main positions in this controversy, let me draw out two points about these chapters about which we can be reasonably confident.

First, throughout these chapters, Aristotle compares the activity of theoretical contemplation with activity in accordance with *phronēsis* and the moral virtues. In making this comparison, his purpose is undoubtedly to talk up the activity of contemplation and to list the reasons why we should rank it over activity in accordance with the other virtues. As well as being the activity of what is best in us, it involves pleasure to a greater (or purer) degree; it relies less on external necessities. Also, unlike activity in accordance with *phronēsis* and the moral virtues, it is pursued only for its own sake. Recall that early in 1.7 he insisted that *eudaimonia* was never sought for the sake of anything else. This is not actually true of courageous actions, for instance, which aim at victory. All moral virtuous activity, apparently, has some goal over and above its own value. (One might worry that this contradicts earlier claims made in the work: virtuous activity has repeatedly been said to be valued for its own sake. But presumably Aristotle means that contemplation is chosen only for its own sake, not for its own sake and some further goal.) All in all, therefore, contemplation scores more highly on all the criteria we are meant to associate with *eudaimonia*.

Second, in both chapters, he talks of us as having different aspects: human and divine, and correlates these with the two kinds of activity, practical and theoretical. His remarks about the divine nature of contemplation are emphatic. Having introduced the

point in the opening lines of 10.7 (quoted above), he returns to the theme later in the chapter. Here he rebuts the criticism that aspiring to such a life is inappropriate for us as mere mortals. He quotes Sophocles and others as counseling us to remain within the realm of the human: "mortals should think mortal thoughts" (1177b31–4). Aristotle will have none of this. Following Plato, he rejects what was a strong traditional view about the gulf between humans and gods, and insists that this divine element is actually essential to us; indeed, to neglect it would be live the life of something else. (Such remarks should be read alongside Plato enjoinder to embrace the divine nature of the soul in the *Phaedo, Republic, Phaedrus, Timaeus* and *Theaetetus*.)

At the end of 10.8, Aristotle returns to the theme yet again, arguing that we associate *eudaimonia* most especially with the gods (a perfectly traditional view) but then claiming that the gods, who must engage in some sort of activity, can only be thought of as engaging in contemplation (not a traditional view). He argues that it would be absurd to think of them as engaged in morally virtuous activities: if they were to act justly, with whom would they be making compacts? What sort of dangers are we to imagine the gods using courage to face? How can they act generously if they possess no money? In Aristotle's view, the only kind of activity in which it is plausible for the gods to engage is contemplation. So, since *eudaimonia* involves virtuous activity, and since it is especially associated with the gods, *eudaimonia* seems to be some form of contemplation (or at least *eudaimonia* in its perfect form, as I shall suggest below).

This is a point where many scholars link the *Nicomachean Ethics* to Aristotle's views elsewhere, notably in the *De anima* and the *Metaphysics*. In *Metaphysics* Λ.7 and 9, he gives his famous account of god as the "unmoved mover," arguing that the activity in which he perpetually engages is none other than contemplation. It is important to note, however, that Aristotle makes no explicit reference to the unmoved mover in the *Nicomachean Ethics*, as if he has decided to spare his readers the intricate theology described in the *Metaphysics*. In *Nicomachean Ethics* 10.8, however, he does say that the virtue of theoretical intellect is something "separate" (1178a22), which is probably a reference to *De anima* 3.4–5 (cf. esp. 430a17–19). Here he claims that theoretical reason, unlike the other faculties of the soul, such as perception, desire, and movement, does not require a bodily organ; as such, it can be associated with the divine. In *Nicomachean Ethics* 10.8, 1178a9–23 his point is that the moral virtues, unlike theoretical intellect, are bound up with our nature as embodied creatures: they involve the passions, and these in turn have a material aspect. (Presumably he means that the passions are accompanied by physiological changes.) Furthermore, because *phronēsis* is inseparable from moral virtue, it is also ultimately linked to the body. Using the theory of the *De Anima*, therefore, we can fill out Aristotle's views on the nature of *nous*. However, even as we do so, we should note that Aristotle himself relegates any in depth discussion of the issue to another branch of philosophy (1178a23). This seems in accord with the methodological remarks made above about the relation between the *Nicomachean Ethics* and Aristotle's other works.

At any rate, the overall point is that the two types of virtuous activity, theoretical and practical, correspond to two distinct aspects of our nature, divine and human.

Now for the main controversy. I shall sketch out two schools of opinion. The first is sometimes called the "inclusivist" interpretation. On this view, *eudaimonia* takes a single form that includes a very wide range of components. We have already alluded to this interpretation above: *eudaimonia* comprises activities in accordance with all the virtues, both moral and intellectual, and within the latter category both the practical

and the theoretical. In addition, it involves the possession of other goods, such as pleasure, honor and friendship as intrinsic components, not merely as the necessary means or opportunities for engaging in virtuous activities. The challenge for such interpreters is to show how so broad a view of *eudaimonia* is compatible with the value accorded to contemplation in 10.7–8.

On a different reading, Aristotle's considered view by book 10 is that there is not just one form of *eudaimonia* that encompasses the activities of all the different virtues, but two. The point of 10.7–8 on this view is to distinguish perfect *eudaimonia*, identified with the activity of contemplation, from a secondary form, activity in accordance with *phronēsis* and the moral virtues. But Aristotle's recommendation is that we embrace them both, because each type answers to one aspect of our nature, human or divine. One way to understand his proposal in these chapters is to say that we should lead "two lives": just as someone might talk of their social life and professional work life, we can and should attempt to interleave the contemplative and practical lives.

Many scholars have written on this issue and proposed ways of defending these interpretations and others besides. There is not the space here to delve more deeply into the debate and defend any one contender. Instead, I wish to conclude by raising a problem that (in my view) affects most interpretations, whether inclusivist or not.

Few will deny that contemplation, partly because of its divinity, is superior to moral activity. Nowhere is this clearer than in the passage in 10.7 when Aristotle attempts to rebut the claims of the traditionalists by appearing to say that, far from turning our backs on this divine activity, we should devote ourselves to it as far as we can. What, then, are we to say about activity of the moral virtues? Whether contemplation ranks as a form of *eudaimonia* in its own right or as a constituent of a single, all-inclusive *eudaimonia*, there is a danger that he holds it to be incommensurably better than moral activity. After all, at one point in 10.7, he seems to say that we should engage in it "as far as we can." But now we seem to have gone to the opposite extreme from the traditionalists. Shall we neglect the moral virtues and be prepared to commit immoral acts, if doing so allows us more freedom and leisure to contemplate?

In 10.8, however, having vaunted contemplation in this way, Aristotle says that the person who contemplates "in so far as he is a human being will perform the actions in accordance with virtue." Perhaps the point is that for such a person to neglect moral virtue and *phronēsis* would deny a vital part of his nature, which would be deeply frustrating. For all his divine-like activity, he remains a person who wants to fit into society and play a role in politics; by nature, he also experiences emotions and has physical appetites. Aristotle is not recommending that we turn our backs on all this, even though he perhaps over-emphasizes the value of the contemplative life, possibly for rhetorical and polemical purposes.

Further reading

Translations with notes

Broadie, S. and Rowe, C. (2002) *Aristotle: Nicomachean Ethics*. Oxford: Oxford University Press.

Irwin, T. (1999) *Aristotle: Nicomachean Ethics, Translation with Notes and Glossary*, 2nd edn. Indianapolis, IN: Hackett.

Collections of articles

Kraut, R. (ed.) (2006) *The Blackwell Companion to the Nicomachean Ethics*. Oxford: Oxford University Press.
Rackham, H. (1934) *Aristotle's Nicomachean Ethics*, revised edition, Cambridge MA: Harvard University Press.
Rorty, A. O. (ed.) (1980) *Articles on Aristotle's Ethics*. Berkeley, CA: University of California Press.

Single-authored introductions

Bostock, D. (2000) *Aristotle's Ethics*. Oxford: Oxford University Press
Pakaluk, M. (2005) *Aristotle's Nicomachean Ethics*. Cambridge: Cambridge University Press.
Urmson, J. O. (1988) *Aristotle's Ethics*. Oxford: Blackwell.

Related chapters

13. Plato on virtue and the good life
14. Plato: philosopher-rulers
25. Aristotle on the political life
26. Aristotle's aesthetics

25
ARISTOTLE ON THE POLITICAL LIFE

Antony Hatzistavrou

"Political life" is ambiguous. It may denote either, generally, life in political society or more specifically life of active engagement with politics. As has been noted before (see Mulgan 1990 and Bostock 2000: 201–202), this ambiguity of political life is relevant to the study of Aristotle's political philosophy. What kind of practical life does Aristotle take the good life to involve? Is it the life of a virtuous person who lives in a political society but need not participate in the administration of its political affairs? Or is it the life of a virtuous person who plays an active political role in his society?

In this chapter I argue that for Aristotle possession of political power is necessary for living a practical life in accordance with complete virtue. Living a practical life in accordance with complete virtue is a constituent of happiness. If one lacks political power and more specifically the power to deliberate about public issues and participate in the administration of justice one cannot exercise fully one's practical virtue and for this reason his happiness is significantly impaired.

Recognition of the importance Aristotle ascribes to possession of political power sheds light on two main tenets of Aristotle's political philosophy. The first concerns the superiority Aristotle assigns to life in political communities over life in villages and households. The second concerns the superiority of life in two correct constitutions, aristocracy and polity, over life in corrupt constitutions (oligarchy, democracy, and tyranny).

However, the importance Aristotle ascribes to one's active engagement with the political affairs of one's community for one's happiness is problematic. It is in tension with his account of political justice which requires that political power be distributed according to merit. This tension arises in the case in which virtuous people who rule in turns discover an exceedingly virtuous person living in their society. Political justice requires that they cease sharing political power and entrust the reign of government to him; although by doing so they sacrifice their happiness.

1 Political power as an external good

In the *Nicomachean Ethics* Aristotle equates the human good with happiness (1.7, 1097a35–b1). There has been considerable controversy over how Aristotle understands happiness (see Scott, this volume). Here I assume a version of the inclusivist interpretation of happiness (for a concise statement of the interpretation I favor, see Irwin 1990:

81). According to it, happiness includes all goods which are desired for their own sake and a practical life in accordance with complete virtue, that is, in accordance with all virtues, is at least a constituent of happiness

The central question of this chapter may be formulated as follows: is one's active engagement with politics necessary for one's achieving a constituent of the good life, namely, living a practical life in accordance with complete virtue? A positive answer to this question is suggested by Aristotle's account of external goods.

In the *Nicomachean Ethics* Aristotle relates happiness to the possession of external goods. He claims that apart from complete virtue:

Text 1

> … happiness evidently also needs external goods to be added … since we cannot, or cannot easily, do fine actions if we lack the resources. For, first of all, in many actions we use friends, wealth, and political power just as we use instruments. Further, deprivation of certain [externals]—for instance, good birth, good children, beauty mars our blessedness. For we do not altogether have the character of happiness if we look utterly repulsive or are ill-born, solitary, or childless; and we have it even less, presumably, if our children or friends are totally bad, or were good but have died.
>
> (1.8, 1099a31–b7; the translation is by Irwin 1999; in the remainder of this chapter I use Irwin's translation with occasional minor alterations.)

At the beginning of chapter 8 of the first book of the *Nicomachean Ethics* Aristotle offered a threefold classification of goods. He claimed that there are goods of the soul, goods of the body and external goods (1098b13–15). By goods of the soul he does not understand whatever is good for the soul (for example, a moral lesson) but rather good actions and activities of the soul (1098b15–16). This suggests that goods of the body may be similarly understood as good conditions of the body rather than what is good for the body (for example, wholesome food). If this is so, by "external goods" Aristotle must refer to a class of goods other than good actions of the soul or good conditions of the body. In text 1, however, he does not appear to follow the same specification of the reference of external goods. For he includes beauty which is a good of the body in the external goods. So in text 1 he juxtaposes external goods to the goods of the soul only and takes them to include goods of the body.

In text 1 Aristotle draws a two-fold division of external goods. On the one hand, some external goods function as instruments for fine actions. On the other, lack of some external goods may mar one's happiness. It is not clear from text 1 how these two classes of external goods differ. It is clear however that this two-fold division of external goods is not exclusive. For example, friends appear in both classes of external goods.

In a later passage Aristotle provides the following explanation of the relation between happiness and external goods:

Text 2

> [N]o activity is complete if it is impeded, and happiness is something complete. That is why the happy person needs to have goods of the body and external

> goods added [to good activities], and needs fortune also, so that he will not be impeded in these ways.
>
> (7.13, 1153b16–19)

The central idea of this passage is that lack of external goods is an obstacle to the performance of activities which constitute happiness. Cooper (1999a), following ancient commentators of Aristotle, suggests that lack of the second class of external goods Aristotle distinguished in text 1 is an impediment to happiness in the following manner: it deprives the agent from *normal* opportunities for the exercise of virtuous activities which is a constituent of his happiness. So, the agent cannot exercise his virtue fully. For example, one's repulsive appearance seriously restricts the range of occasions in which one would exercise temperance (that is, cases in which one would have opportunities for sex). So, his temperance cannot be fully exercised. Furthermore, the relevant occasions are ones in which one would *normally* exercise temperance (since temperance is a virtue which is normally exercised in sexual affairs).

The point is not that a physically repulsive person may be totally unable to *develop* the virtue of temperance. Physical repulsiveness is not an impediment to happiness because it prevents one from developing the virtue of temperance. Rather physical repulsiveness prevents one from *exercising* the virtue of temperance in the normal circumstances in which temperance is exercised. So, a physically repulsive person does not fully exercise temperance. Given that, according to Aristotle, happiness consists in activities in accordance with complete virtue, then, obstacles to the full exercise of a certain virtue are obstacles to happiness. It is in this sense, namely in the sense that it prevents one from exercising one's virtues in the normal circumstances in which they are exercised that lack of an external good mars one's happiness.

Lack of instrumental external goods may be considered a different kind of obstacle to one's happiness. Since, according to text 1, there is a distinction between instrumental external goods and the external goods which mar one's happiness, lack of instrumental goods cannot be an obstacle to happiness by preventing the *normal* exercise of virtues. Their lack may be understood as preventing virtuous activities in circumstances which are not normal for the exercise of the relevant virtues and thus does not affect the issue of whether one fully exercises those virtues. Take, for example, physical beauty. As we have seen, possession of physical beauty is intrinsically linked with the normal exercise of temperance. One may, however, also use one's physical beauty as an instrumental means to achieve virtuous ends which are not intrinsically related to the exercise of the virtue of temperance. For example, one may use one's beauty to charm people in order to prevent a quarrel. In these cases the external good of beauty is not associated with the exercise of temperance with which it is intrinsically linked. Rather it is a means for specific ends which are important for the exercise of another virtue, in our example, friendliness (for Aristotle's account of friendliness see *Nicomachean Ethics* 4.6).

In a similar manner we can understand the dual function of friends which Aristotle includes in both classes of external goods he distinguishes in text 1. Aristotle takes friendship to be a virtue or to involve virtue, to be "most necessary for life" (*Nicomachean Ethics* 8.1, 1155a4–5) and also fine (1155a29–30; for Aristotle's theory of friendship, see Cooper 1999b). Thus, the death of one's friends would prevent one from exercising the virtue of friendship, that is, engage in activities which are normal for friendship and one's happiness would be for this reason impaired. For example, one

would not be able to help one's friends when they are in need motivated by a sense of good will which one knows is reciprocated (for the importance of reciprocated good will in friendship see 1155b31–1156a5). On the other hand, in text 1, Aristotle thinks that sometimes friends are also used as instruments. They are used as instruments when they promote virtuous ends which are not related to the normal exercise of friendship. For example, one may use one's friends as an instrument to prevent the prosecution of an innocent. Using one's friend as an instrument to prevent the prosecution of an innocent is not associated with the kind of activities friends normally engage in out of a sense of good will towards one another which they know is reciprocated. Consequently, the loss of one's friends may impede one's happiness in two different ways: on the one hand one loses opportunities to engage in activities friends normally engage in and on the other one loses a means to promote plans relating to other virtuous activities.

According to Aristotle, instrumental external goods are merely useful for happiness. By contrast those external goods lack of which prevents the full exercise of relevant virtuous activities should be considered necessary for happiness (1.9, 1099b27–28). Without them one cannot fully exercise one's virtues and thus one cannot reach happiness. This does not mean that a virtuous person who lacks the external goods necessary for happiness is miserable. No virtuous person can be miserable. Rather we must understand that person as being neither happy nor unhappy (Irwin 1999: 190).

In text 1 political power figures among the instrumental external goods. For example, one may use one's political power as an instrument to negotiate the release of a political prisoner. But, as we have already seen, Aristotle does not take the division between instrumental external goods and those which are necessary for happiness to be exclusive. Can lack of political power be considered an impediment to the full exercise of a virtue? There is evidence that for Aristotle possession of political power is necessary for the full exercise of a fundamental virtue, namely, practical wisdom.

Aristotle considers practical wisdom and political science to be the same state of mind though they are defined differently (6.8, 1141b23–24). Political science aims at the highest good, namely, happiness and tries to make the citizens good people who perform fine actions (1.9, 1099b29–31). Practical wisdom is believed to focus on the individual's own good (6.8, 1141b29–30). But Aristotle warns that it is a mistake to draw a sharp contrast between practical wisdom and political science: "one's own welfare requires household management and a political system" (1142a9–10).

Furthermore, according to Aristotle, engaging with the good of the city is a finer activity than caring only for one's own good: "while it is satisfactory to acquire and preserve the good even for an individual, it is finer and more divine to acquire and preserve it for a people and for cities" (1.2, 1094b9–10). In other words, the finest activities guided by the state of mind one may describe as either practical wisdom or political science are political activities. Obviously their performance requires possession of political power. So, political power is an external good necessary for the full exercise of practical wisdom or political science and not only an instrumental external good which is merely useful for the exercise of practical wisdom or other virtues.

In the *Nicomachean Ethics* one's active engagement with politics is necessary for one's living a practical life in accordance with complete virtue which should be considered at least a constituent of the good life. Does Aristotle's account of the political life in the *Politics* support the same conclusion?

2 A typology of social lives in the *Politics*

One may initially distinguish four types of social life described by Aristotle in the *Politics*. Each type of life is determined by the social role which predominates in the life of an individual. The basic distinction is between subjects and rulers. Some individuals (the subjects) encounter the social domain as subordinate to the power of others (the rulers). Two further distinctions may be drawn. The first distinction concerns what I call the "principle of subordination." It relates to the social unit within the context of which one is subordinate to the power of another person. Some individuals, namely women and slaves, are household subjects. This means that what determines their status as subjects is their position within the household. Some other individuals, for example, manual workers, farmers, poor people in oligarchies, or rich people in democracies are political subjects. They have the status of a subject because of their position within a city-state.

The second distinction relates to the manner in which rulers exercise their power. Some rulers exercise primarily or exclusively what I call "dominant" power over their subjects. The primary features of domination are the following. The subject is (either by nature or by convention) inferior to the ruler and the rulers rule with a view to the service of their own interests rather the common interest. Domination involves what Aristotle calls "the art of mastership" (see *Politics* 1.7). The paradigmatic cases of rulers with dominant power are the masters of slaves. Aristotle also claims that the rulers of corrupt constitutions (democracy, oligarchy and tyranny) dominate their political subjects (3.6, 1279a21).

Other rulers exercise what I call "authority" over their subjects rather than domination. Those who rule with authority rule in turns over equals for the common interest (3.17, 1288a9–15). According to Aristotle, those rulers rule with political science (3.12, 1282b14–18) which should be considered to have the same content, that is, the advancement of citizens in virtue and the happiness of the city, as the political science Aristotle discusses in the *Nicomachean Ethics*. People who rule with authority are the rulers of two of the correct constitutions, aristocracy and polity.

Since the rulers in aristocracy and polity rule in turns, they are also political subjects. There are good grounds, however, for neither considering them primarily as political subjects nor introducing a fifth type of a mixed life of ruler and subject. Aristotle uses the notion of ruling in turns to signify two things: (a) that some political offices are not held permanently but people occupy them in turns (4.15) and (b) that the same people are ruled when young and become rulers when they reach maturity (7.9 and 14). Insofar as (a) is concerned Aristotle acknowledges that in aristocracy and polity there is some political power, namely deliberation about certain issues (war and peace and audits of officials) which is exercised continuously by all citizens (4.14, 1298b5–8). According to (b) the stage of being ruled is clearly a propaedeutic step the end of which is the development of the capacity to rule. Thus, we are justified in treating those who rule in turns primarily as rulers rather than subjects.

Finally, Aristotle mentions the case of a ruler who neither rules in turns nor dominates his subjects. This is the case of the ruler in absolute kingship which is one of the best constitutions (3.18, 1288a32–41). This person is so much more virtuous than his subjects that it would be unfair to him to share political power with them (3.17, 1288a15–29). Rather all political power should rest in his hands and everybody else should subordinate themselves to his commands. So, the absolute king does not exercise

political authority in the way I specified above. But neither can he be said to dominate his subjects politically. In contrast to the rulers in corrupt constitution, he rules for the common interest. As we will see, the case of absolute kingship is a real oddity in the context of Aristotle's political philosophy. Insofar as the classification of social lives is concerned, it calls for a fifth life to be distinguished. I call it the life of the absolute king.

So, we can distinguish the following five types of social life an individual may live according to the *Politics*:

1. Life of a household subject
2. Life of a political subject
3. Life of a ruler with authority
4. Life of a ruler with dominating power
5. Life of the absolute king

3 Happiness and forms of social lives

Let us see now how the lives we distinguished in the previous section compare with respect to happiness. Aristotle holds that only some people can participate in complete happiness. Others can achieve no happiness at all or very little (*Politics* 7.7, 1328a38–40). It is clear that the life of a household subject contains little happiness or no happiness at all. First, insofar as slaves are concerned, Aristotle holds the embarrassing thesis that there are natural slaves. He believes that some people are by nature "properties of other people" and "tools for action" (1.4, 1254a14–17; throughout this chapter I follow Reeve's (1998) translation). It is just and beneficial for them to subordinate to a master (1.6, 1255b6–9). What justifies this kind of subordination is that the reason of the natural slaves is greatly restricted. It lacks understanding and can only obey the reason encapsulated in the orders of the master (1.5, 1254b20–24). When Aristotle says that the natural slaves lack understanding he means that they lack the deliberative part of the soul (1.13, 1260a13) which would enable them to make decisions. Given that practical wisdom is the virtue of the deliberative part of the soul, the natural slaves should be considered to lack practical wisdom. This does not mean that they are totally devoid of virtue. They participate in virtue to the extent which is necessary for the performance of their task, namely, to obey their master. But given that they lack practical wisdom they cannot possess complete virtue which is the property of the natural master alone (1260a17–20). This probably explains why, although slaves may possess some virtue, they nevertheless do not share in happiness (3.9, 1280a33–34).

Aristotle mentions, though he does not discuss in any depth, the case of those who are slaves by law rather than by nature. Examples are prisoners of war. Their life as household subjects is not happy. Aristotle implies that in contrast to natural slaves they are actually harmed by their subordination to their masters (1.6, 1255b12–15).

Second, women seem to be capable of achieving at best some incomplete happiness. Women possess the deliberative part of the soul but in them it lacks authority (1.13, 1260a13). This implies that their virtue and thus their happiness are not as complete as those of a free man.

Some political subjects do not achieve happiness either. These are manual workers who cannot achieve complete virtue. They include vulgar craftsmen, hired laborers,

tradesmen, and farmers. According to Aristotle, manual workers cannot engage in virtuous activities (3.5, 1278a20–1). Their lives are debase and contrary to virtue (7.9, 1328b40–1). He compares them to delimited slaves (1.13, 1260a41–b1). Their lives lack the leisure which is a precondition for development of virtue and engagement in political activities (7.9, 1329a1–2). Aristotle recommends that the education of free men should not include training in the activities of manual workers since these activities hinder the attainment of virtue (8.2, 1337b5–17).

The life of a political ruler who exercises dominating power does not qualify as happy either. Tyrants, oligarchs, and the democratic mob rule contrary to the demands of nature and justice (3.17, 1287b37–41). So, their life is unnatural and unjust and thus cannot be happy. There is a significant difference though between, on the one hand, the failure of dominating political rulers to achieve complete virtue and, on the other hand, the failure of natural slaves, women, and manual workers to achieve complete virtue. The latter fail to achieve complete virtue because they are by nature incapable of it. This is not necessarily the case with dominating political rulers. Aristotle does not suggest that all dominating rulers are by nature precluded from complete virtue. At least some dominating rulers may have significant natural ability for virtue but fail to materialize their ability.

There remain the following possible candidates for a life of complete virtue and happiness: (a) political subjects in deviant constitutions, (b) political subjects in absolute kingship, (c) political rulers with authority, and (d) absolute kings. Let us begin with examining whether political subjects in deviant constitutions can live the good life. Deviant constitutions are by definition constitutions which aim at the interest of the rulers as opposed to the common interest (3.6, 1279a16–20). Now admittedly "aiming at" the interest of the rulers does not entail that the interests of the rulers are actually served or that the interests of the ruled are actually neglected. But the gist of Aristotle's division between correct and deviant constitutions must be that in deviant constitutions the rulers *actually* rule *at the expense of* their subjects. This is why deviant constitutions are unjust. So, it is plausible to assume that the political subjects of deviant constitutions are actually harmed and thus their happiness is impaired.

If Aristotle continues to hold in the *Politics* the thesis that political power is necessary for happiness, then we can identify one important way in which political subjects of deviant constitutions are harmed. They lack political power and thus are prevented from engaging in activities in which their practical wisdom or political science would be fully exercised. They cannot engage in the finest activities of promoting the good of the city.

Furthermore, if in the *Politics* Aristotle considers political power to be necessary for happiness we can easily see why the lives of political rulers with authority and absolute kings may qualify as practical lives in accordance with complete virtue and happy. Those political rulers are virtuous and by possessing political power they are able to promote the good of the city.

Is there evidence which suggests that in the *Politics* Aristotle continues to understand political power as necessary for happiness? As we will see, the evidence is indirect but points firmly towards this conclusion. A starting point for the examination of the relevant evidence is Aristotle's views in the *Politics* about happiness as the end of political communities or city-states.

4 Happiness as the end of city-states

Aristotle relates happiness and the existence of city-states as follows:

Text 3

> A complete community constituted out of several villages, once it reaches the limit of total self-sufficiency, practically speaking, is a city-state. It comes to be for the sake of living, but it remains in existence for the sake of living well. That is why every city-state exists by nature, since the first communities do. For the city-state is their end, and nature is an end; for we say that each thing's nature—for example, that of a human being, a horse, or a household—is the character it has when its coming-into-being has been completed. That for which something exists, that is to say, its end, is best, and self-sufficiency is both end and best.
>
> (1.2, 1252b27–1253a1)

When Aristotle claims that the city-state exists by nature he means that the city-state satisfies the natural ends of human beings (for this interpretation see Miller (1995: 37–45); for a different account of the natural existence of city-states, see Keyt 1987 and Taylor 1995). More specifically, the city-state exists by nature because it is the end of the first communities. The first communities are the community of man and woman for the sake of procreation and the community of master and slave. From these two communities households are formed (1252b9–10). Collections of households create villages (1252b15–16). A city-state is created once several villages are united.

Aristotle claims that the city-state exists for the sake of the good life. This means that the city-state promotes happiness. More specifically it promotes the happiness of the first communities since the city-state is their end in the sense of being the thing which completes their nature. Thus, there is an intrinsic link between the happiness of humans and the city-state: only in the city-state can they reach happiness. Of course not all humans can reach happiness. As we have already seen, for Aristotle natural slaves and women participate in no or very little happiness. Only some men can live the good life. So, when Aristotle claims that city-states promote happiness he has in mind primarily the happiness of those men who are by nature capable of complete virtue and happiness.

The conclusion that only in city-states can those men who are naturally fitted reach happiness is supported by what Aristotle says in text 3 about the self-sufficiency of city-states. First, by self-sufficiency Aristotle understands self-sufficiency with respect to the good life. Second, the city-state is self-sufficient with respect to the good life because life in the city-state is self-sufficient with respect to the good life. Thus, when Aristotle claims that the city-state is the end of the first communities in terms of self-sufficiency we must understand him as claiming that only life in the city-state (and not life in the first communities) is happy. This interpretation is corroborated by the way Aristotle defines the city-state in Book 3: "a city-state is the community of families and villages in a complete and self-sufficient life, which we say is living happily and nobly" (3.9, 1280b40–1281a2). The point Aristotle is making is that a city-state is a particular form of living together. It is not a mere military alliance or a financial association (1280a31–1280b13). And it is different from the living together

of mere households and villages. It is a living together exemplified in a life of virtuous and happy activities.

Obviously Aristotle does not think that in all city-states people enjoy a life of virtuous and happy activities. Communal life in deviant constitutions can hardly be considered virtuous or happy. Rather when Aristotle speaks of the communal life in city-states as being self-sufficient with respect to happiness he refers to "the best" city-states, that is, city-states with correct constitutions which succeed in fulfilling the natural desires and capacities of men.

What exactly does the best city-states' form of communal life involve that makes it happy? We have seen that the best city-states' form of communal life is the end of the household's and the village's forms of communal life. It is reasonable to expect to make progress towards answering our question by determining the aspects in which the best city-states' form of communal life differs from the household's and the village's forms of communal life.

5 Comparing city-states with households and villages

Unfortunately Aristotle is sparse with details about how the communal lives of city-states, villages and households compare to each other. We may summarize the information he provides as follows:

1. Households are communities created (out of an association of (a) man and woman and (b) master and slave) for the satisfaction of everyday needs (1.2, 1252b9–13).
2. Every household is ruled in a kingly manner by the eldest male member (1252b20–21).
3. Villages are created when households come together for the satisfaction of needs other than the everyday ones (1252b15–16).
4. Villages are ruled in a kingly manner by the eldest male member since they come out of households and are united by relations of blood (1252b16–17).
5. The city-states are communities of numerous villages which are self-sufficient (with respect to the good life) and came about for the sake of life but exist for the sake of living well (1252b27–30).
6. The first city-states were ruled in a kingly manner since they were created out of villages (which were ruled in a kingly manner) (1252b19).

Aristotle's claim in (5) that the city-states came about for the sake of life suggests that at least one respect in which life in the best city-states differs from life in households and villages is that it is more secure. But higher security cannot be the only differentiating mark between these three forms of life. For given Aristotle's thesis that only the best city-states are self-sufficient with respect to the good life and are thus the end of households and villages, the form of communal life in the best city-states must provide individuals with elements of the good life not available in households and villages. The gist of Aristotle's point in text 3 concerning the city-state's self-sufficiency with respect to the good life is that only in the best city-states can human beings be happy. It is not that only in the best city-states can human beings secure the happiness already attained in villages or households.

What elements of happiness do those who are by nature capable of complete virtue and happiness achieve by living in the best city-states which are not already available

to them in villages and households? A key to answering this question may be provided by focusing on how Aristotle identifies the primary agents of the communal life in city-states, namely, the citizens.

Aristotle defines citizen as follows:

Text 4

> [S]omeone who is eligible to participate in deliberative and judicial office is a citizen in this city-state, and . . . a city-state, simply speaking, is a multitude of such people, adequate for life's self-sufficiency.
>
> (3.1, 1275b18–21)

Some clarifications are due concerning this definition. First, this is the definition of what Aristotle calls "unqualified" citizen (1275a19). Unqualified citizens are contrasted with citizens of a sort, like resident aliens, or minors and elderly people who are no longer required to perform civic duties (1275a5–19). Unqualified citizens have an active political role: they participate in political decision-making and the administration of justice (1275a22–23). So, Aristotle counts as citizens not all those who reside in the city-state but only those who possess political power.

Second, it is not possession of any type of political power which makes a resident of a city-state a citizen of that city-state. For example, it is not because one holds a minor political office, say, one is a tax collector, that one is a citizen of Athens. Rather, it is because one is an assemblyman and a juror in Athens. What unites the two offices is that they are indefinite. So, it is possession of some indefinite political power which makes a free man resident in a city-state a citizen.

Third, Aristotle's model is the democratic citizen who both participates in the assembly and is a member of a jury (see Schofield 2011). He believes, however, that his definition could be amended so as to apply to other deviant constitutions in which citizens are those who are eligible for some office which involves deliberation or judicial judgment for some limited period of time (1275b13–17). His point is not that the reformulated definition is a more accurate definition of citizenship. Rather his point is that even incomplete citizens in deviant constitutions may partly satisfy the definition of a citizen (see Irwin 1990: 82–83).

Aristotle also believes that there is an intrinsic connection between being an unqualified citizen in the best city-states and achieving happiness. Within the context of his discussion of the best constitution in the seventh book of the *Politics* Aristotle claims that those who have deliberative and judicial power in the best constitution, that is, the unqualified citizens, or those who will acquire such power after they fulfill their military duties, should be properly regarded as parts of the city-state (7.9, 1329a3–5). His thesis should be understood in the context of the distinction he makes between parts of a naturally constituted whole and those things which are merely necessary conditions of its existence. Given that the city-state exists by nature this distinction applies to it (7.8, 1328a21–25). Aristotle appears to think that in contrast to those things which are merely necessary for the existence of a natural whole all its parts have something in common. What parts of the city-state have in common is happiness (1328a26–37). For this reason Aristotle claims that those who like the vulgar manual workers cannot achieve complete virtue and happiness should not count as parts of the city or citizens (7.9, 1329a18–24). Only those who currently possess (or will acquire after they fulfill

their military duty) the power to deliberate about public issues and engage in the administration of justice are proper parts of the city since they alone achieve complete virtue and happiness.

Why does Aristotle put so much emphasis on the power to deliberate about public issues and engage in the administration of justice? What the citizens deliberate about is the common good (7.8, 1328b13–15). Good deliberation is the *par excellence* function of the person who possesses practical wisdom (*Nicomachean Ethics* 6.7, 1141b10–11). Its aim "accords with rational calculation in pursuit of the best good for a human being that is achievable in action." (1141b13–14) So, in the best city-state the citizens are able to exercise in the best way their practical wisdom about the common good and thus engage in the finest activities. For example, they are able to pass good laws and adopt right policies which create the right educational framework for the development of virtue in the city-state. Furthermore, in their capacity as judges they are able to rectify injustice and redress inequality (see Aristotle's account of rectificatory justice in the *Nicomachean Ethics* 5.4). In other words, they are able to live a practical life in accordance with complete virtue.

We can now see how life in the best city-states advances the happiness of those who are by nature capable of living a practical life in accordance with complete virtue in comparison to life in households and villages. According to Aristotle, all households and villages and even the first city-states are ruled kingly by the eldest male. This means that apart from the eldest male the rest of adult men who may be naturally capable of achieving complete virtue do not participate in the making of important decisions about the common good and thus fully exercise their practical wisdom. Even in the first city-states they lack the opportunity to influence in a significant manner the development of others in virtue. Furthermore since the eldest male does not rule because of his superior virtue (but rather because of his age), it is unlikely that even he lives in accordance with complete virtue and promotes the common good. It is only in the best city-states that the individuals who are capable of complete virtue can actually engage in the finest activities of advancing others in virtue. They do so by being citizens, namely, having the power to deliberate about the common good and redress injustice in the city-state.

Thus, in contrast to the form of communal life in households and villages life in the best city-states promotes happiness because it enables those who are by nature fitted to live a practical life in accordance with complete virtue. Only in the best city-states do they have the power to deliberate about the common good and administer justice and thus engage in the finest practical activities.

Can one promote the common good, which consists primarily in one's advancing one's fellow-citizens in virtue, without actively engaging in politics, that is, without introducing laws and policies or deciding cases in courts? Perhaps one could promote the common good indirectly by having one's understanding of the common good guide one's everyday interactions with one's fellow-citizens (see Cooper 2010). I believe that this kind of non-political contribution to the promotion of the common good does not qualify according to Aristotle as the finest practical activity one may engage in. First, if the person who attempts to promote the common good in this non-political manner lives in a corrupt constitution and thus a city-state which has not been developed according to nature, his attempts would, to a great extent, be frustrated. He would be operating in a social framework determined by bad laws which contravene the common good and by a judicial system which does not promote justice. Though his attempts to promote the common good may be well-meant it is doubtful whether he will succeed

in advancing to a significant degree virtue in society. Second, activities which promote the common good privately do not count as the finest activities even when performed in the best city-states and thus are not socially frustrated. For, according to Aristotle, private activities are not particularly efficient in promoting virtue in the city-state. As Aristotle puts it, in the *Nicomachean Ethics*:

Text 5

> It is difficult … for someone to be trained correctly for virtue from his youth if he has not been brought up under correct laws; for the many, especially the young, do not find it pleasant to live in a temperate and resistant way. That is why laws must prescribe their upbringing and practices; for they will not find these things painful when they get used to them. Presumably, however, it is not enough if they get the correct upbringing and attention when they are young; rather they must continue the same practices and be habituated to them when they become men. Hence we need laws concerned with these things also, and in general with all of life. For the many yield to compulsion more than to argument and sanctions more than to the fine.
>
> (10.9, 1179b32–1180a6)

Any attempt by private individuals to instruct people lacks the required authority and is bound to be resisted:

Text 6

> [A] father's instructions lack this power to prevail and compel; and so in general do the instructions of an individual man, unless he is a king or someone like that. Law, however, has the power that compels; and law is reason that proceeds from a sort of practical wisdom and understanding. Besides, people become hostile to an individual human being who opposes their impulses, even if he is correct in opposing them, whereas a law's prescription of what is decent is not burdensome.
>
> (1180a19–24)

Private attempts to promote virtue in the city-state will not have the same effect as the enactment of good laws and the administration of legal sanctions. The proper way of promoting virtue in society is through the authority of law. It is not through private individual activity. So, the virtuous person in the best city-states who abstains from engaging with public decision-making and the administration of justice deprives himself of the opportunity to engage in the finest practical activities, that is, the most effective activities in promoting virtue in the city-state.

On the basis of the above we can see that political rulers with authority and absolute kings can live a practical life in accordance with virtue since they engage in the finest practical activities. Political subjects in deviant constitutions cannot be considered to enjoy the best form of practical life. Even if they try to privately promote virtue in their city-state their attempts will be significantly frustrated. More importantly, the fact that they do not participate in political decision-making and the administration of justice is a principal reason why their attempts to advance others in virtue will be ineffectual.

6 The paradox of the absolute kingship

Aristotle includes absolute kingship among the best constitutions. When a supremely virtuous person is found in a city-state then it is just for this person to rule and for the rest of the free men to subordinate to his authority. What justifies the supremely virtuous person's claim to rule and the subsequent subordination of the free men who are otherwise capable of living the good life to his authority is precisely his superior virtue.

Aristotle's classification of absolute kingship among the best constitutions is anomalous for the following reasons. The first reason is that it makes Aristotle's account of happiness internally unstable. It is internally unstable because one and indeed the primary component of happiness, that is, complete virtue, conflicts with a necessary condition of happiness, that is, exercise of the power to deliberate on public issues and administer justice, in the following manner: in certain cases complete virtue requires that the agent sacrifices this necessary condition of his happiness. This happens when people who rule with authority in an aristocracy or a polity realize that one man among them surpasses them in virtue to such an extent that it is just for them to subordinate themselves to him.

According to Aristotle, justice requires that goods be distributed on the basis of merit (see his account of distributive justice in *Nicomachean Ethics* 5.3). The relevant criterion for the distribution of political power is an individual's contribution to the advancement of virtue in the city-state. As Aristotle puts it,

> [P]olitical communities must be taken to exist for the sake of noble actions, and not for the sake of living together. Hence those who contribute the most to *this* sort of community have a larger share in the city-state than those who are equal or superior in freedom or family but inferior in political virtue, and those who surpass in wealth but are surpassed in virtue.
>
> (*Politics* 3.9, 1281a2–8; emphasis in Reeve's translation)

So, the sense of justice of those who rule with authority in aristocracies or polities obliges them to offer the reign of government to the supremely virtuous person. But then by following the demands of complete virtue they have to sacrifice a constituent of their happiness.

This situation is the reverse of what happens in Plato's *Republic*. It appears (though this is an issue of scholarly dispute) that justice requires that the philosopher-kings sacrifice their happiness (which consists primarily in constant contemplation of the Forms) (*Republic* 519c8–520e3). They are required to reciprocate for the benefits they received in the perfect city (primarily their superior education) by ruling the perfect city. What justice requires is the sacrifice of the happiness of the few virtuous individuals for the sake of the happiness of the many significantly less virtuous people, that is, the citizens of the perfect polis. By contrast what Aristotle's principle of justice requires is the sacrifice of the happiness of the more numerous but comparatively less virtuous people for the sake of the happiness of one supremely virtuous individual.

The second reason relates to Aristotle's understanding of the best city-states' communal life as the end of households and villages. As we have seen, in contrast to what happens in households and villages, in the best city-states, those who are capable of living the practical life in accordance with complete virtue have the opportunity to engage in deliberation about public matters and the administration of justice. But in

absolute kingship the vast majority of those men is precluded from engaging in these fine activities.

The third reason relates to Aristotle's account of the wisdom of the multitude. Aristotle argues that "it is just for the multitude to have authority over the more important matters" (3.11, 1282a38). This holds not for every multitude but only for a multitude consisting of people who have individually some modest share in virtue and practical wisdom (1281b15–20; cf. 1281b1–5). Aristotle bases his argument on two analogies. According to the first analogy those who are modestly virtuous are analogous to those who have experience in crafts though they lack the relevant craftsmanship. Think, for example, of some people who may be experienced in medicine, say some experienced nurses, though they are not medical doctors. Aristotle argues that the collective judgment of those who are experienced in medicine, about, for example, who is a good doctor may be more reliable than the judgment of a medical doctor. In a similar manner the collective judgment of those who have some experience in virtue though no moral excellence about elections and inspections of officials may be more reliable than the judgment of one virtuous person (1281b31–1282a7).

The second analogy is an analogy between those who are modestly virtuous and the users of products of crafts. The collective judgment of the guests of a feast about the quality of the food served may be more reliable than the judgment of the cook. In a similar manner, the collective judgment of the modestly virtuous about policies may be more reliable than the judgment of one virtuous person (1282a14–23).

If there is some justification for ascribing political power to a multitude of people who have some experience in virtue though by no means moral excellence, then there should be *a fortiori* strong reasons for allowing some share of political decision-making to those virtuous people who in the absence of a supremely virtuous person would have been qualified to rule in turns in an aristocratic constitution or in a polity. But these very same people have no share in deliberation about public affairs in absolute kingship.

One may assume that the supremely virtuous individual would assign some political offices to those who are sufficiently virtuous (though not as virtuous as he is). But even if this assumption is correct, it does not alleviate the tension between Aristotle's account of absolute kingship as one of the best constitutions and the importance he ascribes to deliberation about public affairs and administration of justice as necessary conditions for happiness. As we have seen, it is not possession of any type of political power which matters for happiness. It is the power to enact good laws, decide on policies which would greatly advance citizens in virtue and redress injustice in society through the administration of legal sanctions. It is this type of political power which those who would have been virtuous enough to rule in aristocracies and polities have to abrogate when they subordinate to the supremely virtuous ruler.

Aristotle acknowledges that the possibilities of such a supremely virtuous individual emerging are slim (7.14, 1332b23–27). He clearly thinks that one is not to be found in his contemporary societies (5.10, 1313a3–5). So, the paradox of absolute kingship is unlikely to have any practical import. But, it has important theoretical implications for Aristotle's political philosophy and threatens the cogency of his views about the possession of political power in the form of power to deliberate about public issues and administer justice as a necessary condition for living a practical life in accordance with complete virtue.

To sum up, in both the *Nicomachean Ethics* and the *Politics* Aristotle takes possession of a type of political power to be necessary for living a practical life in accordance

with complete virtue. The relevant type of political power is the power to deliberate about public affairs and to engage in the administration of justice in the city-state. The political life he takes to be equivalent to the best practical life and a constituent of happiness is thus a life which involves active engagement with politics. His account of absolute kingship, however, has implications which are in tension with the importance he ascribes to a virtuous life of active engagement with politics. If a supremely virtuous individual is found, those who otherwise would have been able to live a virtuous life of active engagement with politics have to abstain from deliberating about public affairs and engaging with the administration of justice and thus sacrifice a component of their happiness.

References and further reading

Translations and commentaries

Keyt, D. (1999) *Aristotle* Politics *Books V and VI*, Oxford: Clarendon Press.
Kraut, R. (1997) *Aristotle* Politics *Books VII and VIII*, Oxford: Clarendon Press.
Newman, W. L. (1887–1902) *The Politics of Aristotle*, 4 vols., Oxford: Clarendon Press.
Robinson, R. (1995) *Aristotle* Politics *Books III and IV*, with supplementary essay by D. Keyt, Oxford: Clarendon Press.
Saunders, T. J. (1995) *Aristotle* Politics *Books I and II*, Oxford: Clarendon Press.

References

Bostock, D. (2000) *Aristotle's Ethics*, Oxford: Oxford University Press.
Cooper, J. M. (1999a) "Aristotle on the Goods of Fortune," in his *Reason and Emotion*, Princeton, NJ: Princeton University Press: 292–311.
Cooper, J. M. (1999b) "Aristotle on the Forms of Friendship," in his *Reason and Emotion*, Princeton, NJ: Princeton University Press: 312–335.
Cooper, J. M. (2010) "Political Community and the Highest Good," in J. Lennox and R. Bolton (eds.) *Being, Nature and Life: Essays in Honour of Alan Goethelf*, Cambridge: Cambridge University Press: 212–264.
Irwin, T. (1990) "The Good of Political Activity," in G. Patzig (ed.) *Aristoteles Politik*, Göttingen: Vandenhoeck and Ruprecht: 73–98.
Irwin, T. (1999) *Aristotle* Nicomachean Ethics, Indianapolis: Hackett.
Keyt, D. (1987) "Three Fundamental Theorems in Aristotle's *Politics*," *Phronesis* 32: 54–79.
Miller, F. D. (1995) *Nature, Justice and Rights in Aristotle's* Politics, Oxford: Oxford University Press.
Mulgan, R. (1990) "Aristotle and the Value of Political Participation," *Political Theory* 18: 195–215.
Reeve, C. D. C. (1998) *Aristotle* Politics, Indianapolis: Hackett.
Patzig, G. (ed.) (1990) *Aristoteles Politik*, Göttingen: Vandenhoeck and Ruprecht (a collection of papers from XI Symposium Aristotelicum).
Schofield, M. (2011) "Democratic Aristotle and the Democratization of Politics," in B. Morison and K. Ierodiakonou (eds.) *Episteme etc. Essays in Honour of Jonathan Barnes*, Oxford: Oxford University Press: 285–301.
Taylor, C.C.W. (1995) "Politics," in J. Barnes (ed.) *The Cambridge Companion to Aristotle*, Cambridge: Cambridge University Press: 233–258.

Further reading

Keyt, D. and Miller, F. D. (eds) (1991) *A Companion to Aristotle's* Politics, Blackwell: Oxford (a collection of articles on the *Politics*).
Kraut, R. (2002) *Aristotle: Political Philosophy*, Oxford: Oxford University Press (a comprehensive treatment of Aristotle's political philosophy).
Mulgan, R. G. (1977) *Aristotle's Political Theory*, Oxford: Clarendon Press (an overview of Aristotle's political theory).

Vander Waerdt, P. A. (1985) "Kingship and Philosophy in Aristotle's Best Regime," *Phronesis* 30: 249–273 (an original solution to the paradox of absolute kingship different from the interpretation presented in this chapter).

Waldron, J. (1995) "The Wisdom of the Multitude," *Political Theory* 23: 563–584 (a philosophical analysis of some implications of Aristotle's relevant arguments).

Related chapters

13. Plato on virtue and the good life
14. Plato: philosopher-rulers
22. Aristotle's philosophy of nature
23. First philosophy first: Aristotle and the practice of metaphysics
24. Aristotle on the good life

26
ARISTOTLE'S AESTHETICS

David K. O'Connor

How should a work for the tragic stage or a work of epic poetry be constructed so that it will most deeply engage the viewers? This is the guiding question of Aristotle's *Poetics*, his main contribution to the philosophical field now called aesthetics. But a distinctive feature of Aristotle's account of the power of epic and tragedy to engage their audience is his subordination of all other aspects of these two genres, especially the musical properties of the verse and, in the case of tragedy, the visual presentation on stage, to what Aristotle calls the *mythos* of the work. By *mythos*, Aristotle means the way the events are put together into a story or plot. So the focus of Aristotle's aesthetics is what makes for a gripping story in the serious genres of epic and tragedy.

There is an intimate connection between what makes a tragedy work and what is at the heart of moral interest in a human life. The moral dimension of tragedy and of our response to it, and the aesthetic dimension of our attraction to the moral life, are mutually reinforcing and mutually informing. So Aristotle's *Nicomachean Ethics* lights up in a special way when it is brought close to the *Poetics*. Aristotle famously uses an aesthetic formula about how a virtuous person sees a virtuous action when choosing to perform it: the virtuous person acts "for the sake of the *kalon*." *Kalon* is a common Greek word, difficult to translate, which refers to something that is beautiful, noble, or especially appropriate. At its greatest magnitude and height, the virtuous life is not only good, but resplendent, and moral agents in real life take on the same attractiveness as the tragic protagonists on the stage. This aesthetic aspect of moral life is, then, also a part of Aristotle's aesthetics.

Story, happiness, and action

"The most important part of a tragedy," Aristotle says, "is how the things enacted are put together. For tragedy is imitation (*mimēsis*), not of human beings, but of actions and of a way of life." This focus on action (*praxis*) defines Aristotle's entire treatment of tragedy. But he explains this focus by linking it immediately to the central notion in his account of the moral life, to happiness (*eudaimonia*): "Happiness and unhappiness come about in action, and the end is some sort of action, not some quality—for people are of a certain quality because of their character traits, but happy or the opposite because of their actions" (*Poetics* 6, 1450a15–20). Our interest, whether aesthetic or moral, is arrested primarily by people's happiness and unhappiness, by their success and failure.

Of course, our response to actions on stage or in life, even our understanding of what the actions are, depends on knowing something about the people who perform those actions. In particular, we need to know about their virtue or their vice. But our primary aesthetic interest, Aristotle believed, was never simply in seeing an image of virtue or of vice, no matter how finely rendered. The mere having of a virtue or a vice is no story at all. Someone on stage performing the actions of Oedipus will certainly want to convey his noble perseverance, not to say his prickly stubbornness. But we come to the theater to watch Oedipus solve the mystery of the plague of Thebes, not to admire a static portrait. The protagonist's virtues and vices are, so to speak, adverbial, coloring the action but not defining the substantial center of interest. The action bears the significance, and the character shines further light upon it. And so Aristotle concludes this passage with a rigorous statement of the priority of story over character: "People do not perform actions so that they can imitate character traits; rather, they include the character traits because of the actions. Thus the things enacted, that is, the story is the end of tragedy, and the end is the most important of all the parts" (*Poetics* 6, 1450a20–23). Aristotle provides a final striking analogy with the art of painting to illustrate and round off his discussion of this topic: "The story is the principle of tragedy, and like its soul, while character traits are secondary. It is similar in painting: if someone applied the most beautiful pigments without order, it would not be as pleasing as a likeness merely outlined" (*Poetics* 6, 1450a38–b3).

The subordination of character to story, of virtue to action, is as prominent in Aristotle's analysis of life outside the theater as of life inside it. Two passages from the *Nicomachean Ethics* are especially insistent on the point. Aristotle felt the need to resist certain friends of virtue, who would elevate the mere having of virtue to the pinnacle of success. He rejects this elevation firmly, the first time in the ordinary language of *praxis*: "Virtue appears too little of an end to be happiness. It seems possible, after all, while having virtue even to sleep or to be devoid of action [*praxis*] entirely through a whole life, and in addition to suffer evils and the greatest misfortune. No one would deem such a person happy, except to defend a pet thesis" (*Nicomachean Ethics* 1.5, 1095b31–1096a2). A few chapters later, after introducing his more technical vocabulary of *energeia* for action and activation, he elaborates on the point: "It is possible for a state of virtue to be present without accomplishing any good, as with one sleeping or otherwise unconscious, but this isn't possible when the state is activated [*energeia*], for then one will be performing action [*praxis*], and performing it well. At the Olympic Games it is not the most beautiful or strongest who are crowned, but those who compete, for they are the ones who win" (*Nicomachean Ethics* 1.8, 1098b33–1099a5). The competitors (*agōnistai*) are also the ones who lose, of course, and athletes are the protagonists in a drama of success and failure, a drama that draws us to the competitors. Aristotle has a fan's interest in athletic competitors, with their virtues activated and energized. Watching athletes, we will see, is closely akin to watching those who perform the actions on a tragic stage.

Aristotle identifies three primary features of stories that arrest our interest, all of them closely tied to the actions being imitated. "The most important means by which tragedy enchants the soul are parts of the story, namely, reversals and recognitions" (*Poetics* 6, 1450a33–35). He devotes more of the *Poetics* to considering the various ways these two story devices can be deployed and structured than to any other topic. By a "reversal," he means a reversal of fortune; by "recognition," he means the sudden discovery of some crucial fact that reveals a reversal of fortune. The "most beautiful recognition," that is,

the most powerful tragic punch, is delivered when the reversal and the recognition happen at the same time, as in Sophocles' *Oedipus the King* (see *Poetics* 11, 1452a32–33). Of course, we are not engaged by a story in the manner of tragedy unless there is a third element present: "Reversal and recognition are two parts of story, and suffering is a third. Suffering is an action destructive or painful, such as deaths that are shown, and tortures and woundings and all such things" (*Poetics* 11, 1452b9–13). There must be suffering or the threat of suffering if our attention is to be held. In this respect, epic poetry is no different from tragedy: "Epic poetry must have the same forms as tragedy. … It too needs reversals and recognitions and sufferings" (*Poetics* 24, 1459b7–11).

There is much of particular interest in Aristotle's discussions of how various tragedies deploy these three story devices, and in his claims about which deployments are most effective. Generally speaking, the most effective story will create the most intense interest in the protagonists by exciting pity and fear; exactly how this can be done is the primary subject of chapters 11, 13, 14, and 16, and also of chapter 18's treatment of the building up and resolution of tension in a tragic story. At the level of character, the tragic protagonist must be sufficiently "like us" to elicit pity and fear for his (actual or threatened) suffering, yet sufficiently "better than us" to elicit elevation (see *Poetics* 13, 1453a4–6 with 15, 1454b8–15). At the level of story, reversal, recognition, and suffering all combine to keep us intimately attached to the success or failure of the great and significant actions undertaken. This redoubled intimacy reveals itself when we leave the theater, spent and exhilarated. The best tragic stories do not leave us merely stunned by the ravages of evil chances, nor do they merely satisfy a vulgar interest in poetic justice, where the bad are punished and the good flourish. Somehow, the best stories enchant us with something more intimate than these pleasures, common as they may be in the theater. The story devices are all, at their best, instrumental to producing this mysterious intimacy.

The passage most often relied upon to pluck out the heart of this mystery comes from Aristotle's first general definition of tragedy: "Tragedy is an imitation of a significant, complete action … that through pity and fear effects the catharsis of these sorts of sufferings" (*Poetics* 6, 1449b24–28). A large majority of commentators take "these sorts of sufferings" to refer to the emotions of the audience, namely, pity and fear, and perhaps other related emotions. Then they think of "the catharsis" of emotions of pity and fear as some sort of refinement, correction, or other positive formation of the way the audience members feel such emotions. (An older view that the catharsis might be simply the purging or removal of such emotions is now rarely defended.) All such interpretations find it frustrating that Aristotle says nothing at all elsewhere in the *Poetics* about this process of positive sentimental formation of our pitying and fearing, since they take it to be the defining psychological experience of the tragic audience.

A minority of commentators—I am among them—insist that all versions of this audience-centered reading of the passage are fundamentally mistaken, and further that audience-centered readings of this passage have created a false frustration about catharsis. Suppose instead one takes the passage to be story-centered, so that Aristotle is giving a preliminary statement of how a powerful tragic story will be structured. (He will soon introduce the notion that reversal and recognition are the key generators and focusers of pity and fear.) Such story-centered interpretations take "these sorts of sufferings" to refer primarily to the sufferings in the story (as, for example, in Aristotle's parallel comment about epic stories at *Poetics* 24, 1459b7–11, quoted above), not the emotions of the audience. This way of taking "sufferings" seems much more in the spirit of

Aristotle's general movement of thought. So this passage from chapter 6 would say in a preliminary way what this later passage says more fully: "The way the most beautiful tragedy is put together must not be simple, but complex [that is, involve reversal and recognition], and be imitative of what is fearful and pitiable" (*Poetics* 13, 1452b30–33). This reading has the great advantage of making Aristotle's first definition of tragic story focus on exactly those parts of the story structure he goes on to articulate at such length, namely, those sufferings revealed through reversal and recognition, productive of pity and fear. On this story-centered view, "the catharsis" refers primarily to the resolution of the tension in the story—"So Oedipus will be destroyed," or "So Orestes will be spared"—not to a never-to-be-discussed sentimental formation of the audience. From this interpretive perspective, Aristotle will spend many chapters elucidating the preliminary formula that tragedy effects a catharsis of the sort of sufferings that, within a good tragic story, provoke pity and fear.

Of course, if the story is properly constructed, with reversals and recognitions and appropriate characters, these story-centered sufferings will be pitiable and fearful, and so provoke these emotions in the audience. These emotions keep the audience engaged with the staged actions. And a good story will build tension until the tragic situation is clarified, most powerfully and arrestingly when the resolutions grow plausibly from the story structure itself, less when the resolutions depend on ill-prepared chances, or forces external to the actions of the story. But it is a fundamental mistake to equate the audience's experience of this story catharsis, the resolution of the story's tensions, with an undefined (by Aristotle) catharsis or reformation of the audience's very feelings of pity and fear. Pity and fear keep us inside the imitation, so to speak; it is crucial that we feel them, so Aristotle describes with great precision the conditions under which we will feel them. But Aristotle shows no concern at all with how tragedies might develop, refine, or otherwise change the way we feel pity and fear, say by stiffening the sentimental audience member or softening the judgmental one. Pity and fear are the necessary instruments of our tragic engagement, but not the essential ends of the effect tragedy has on us. We leave a performance of *Oedipus the King* spent and exhilarated, in wonder at Oedipus and ourselves. The true puzzle of tragic experience is how we are expanded by Oedipus's greatness, not how we become sensitive to his vulnerability. Only a small-souled person looks to leave the tragic theater with a more refined way of feeling sorry for Oedipus.

Aristotle's action-focused account of happiness (*eudaimonia*) and story (*mythos*) evacuates the intimacy of these heroes, and so of us, with the gods. Any reader who turns from the extant tragedies themselves to Aristotle's account of tragedy will be struck by the very small role—none at all is closer to the truth—the connection between the human and divine realms plays in the *Poetics*. Aristotle's aesthetic world is made for his moral world: both exclude any anxious intimations with a divine world unfocused by human choice and action. Perhaps Aristotle's demotion of the lyrical and musical aspects of tragedy is a necessary cost of avoiding such anxieties. His action-focused account of catharsis, however one understands this catharsis, certainly seems detached from the musical roots of cathartic ecstasy. Aristotle does not argue against a more directly religious or mythic experience of tragedy and happiness; he simply silences it, expelling the gods from the very words such an experience would use to understand itself.

Tragedy and the mega-virtues

While any virtuous action is chosen "for the sake of the *kalon*," and so has an aesthetic dimension to it, this aesthetic dimension shines out most clearly in the two virtues of greatness, *megaloprepeia* (often translated "magnificence") and *megalopsychia* (often translated "magnanimity"). Magnificence focuses more on spending money, especially in public acts of benefaction, while magnanimity focuses more on honor, but the two virtues are not always sharply distinguished. These two mega-virtues, as I will call them, are the most resplendent virtues, and they have a special connection with tragedy. In particular, the two mega-virtues bring out the crucial role that sheer magnitude plays in our response to tragedy. Here the literal meaning of *megalopsychia* is always worth keeping in mind: "having a big life force." There is something about the way the mega-virtues show themselves that makes them inspire wonder, rather than mere respect. This wonder is akin to the effect of tragedy, and is a clue to how tragedy expands us. Tragedy produces wonder in us, through the surprising events that are then revealed to have been perfectly plausible or necessary all along (see *Poetics* 9, 1452a1–11). So wonder is closely connected to the central devices of a tragic story, reversal, recognition, and suffering.

An amusing little observation of Aristotle's about *megalopsychia* reveals something special about the mega-virtues: "*Megalopsychia* requires magnitude, just as physical beauty requires a body with magnitude; small people can be elegant and well-proportioned, but not beautiful" (*Nicomachean Ethics* 4.3 1123b6–8). The mega-virtues do not just have more of what ordinary virtues have. Their magnitude makes them distinguished even in the good company of the other virtues, for they achieve a beauty unlike the ordinary virtues. One aspect of this beauty is the freedom and power that they display. So while the magnificent man spends more than the merely liberal man, the distinction between the two is not captured just by pointing to the greater monetary value of the magnificent expenditure since the magnificent man will outdo the liberal man even in a case of equal expenditure. For the man of mega-virtue makes of his expenditure an active accomplishment (*ergon*, the root of *energeia*), while the man of merely ordinary virtue obtains only a possession. To pay for a good party, elegant and tasteful, is the part of an ordinary man; to put on a party that costs no more, but that is an event, not just a good time, is the part of the mega-man. As Aristotle says, "The same virtue does not belong to a possession and to an active accomplishment. With a possession, what is most valued is what is worth most, such as gold; but with an active accomplishment, what is most valued is what is great (*mega*) and beautiful. (Something of this sort is wonderful to contemplate, as what displays *megaloprepeia* is wonderful.) And so the virtue of an active accomplishment of *megaloprepeia* consists in magnitude" (*Nicomachean Ethics* 4.2, 1122b14–18). Here the aesthetic dimension of the mega-virtues is clearly visible.

Now, magnitude cannot in itself produce this attractive beauty. That a small body cannot be beautiful does not imply that the most beautiful body will be the largest body. There is some principle of order or limit with beauty, in addition to the principle of magnitude. Power must be focused and harnessed, or it will produce a disorganized and vulgar display, like the rich man who puts on a club dinner in the style of a wedding reception (*Nicomachean Ethics* 4.2, 1123a22). Aristotle emphasizes that it is the combination of greatness of magnitude and appropriateness in the magnificent person's expenditure that achieves beauty. But it would be a mistake to think that order is in

itself the principle of beauty and wonder in the mega-virtues. Order is necessary to make power effective, to stylize it; but power is not merely an instrument for achieving order.

This relationship between order and magnitude, where order makes power effective and organized, but power remains the defining reality, is important to tragedy as well. Aristotle's discussions of the magnitude that makes the best tragedy are much the same as his discussions of the mega-virtues. The mega-virtues might appear to differ from the ordinary virtues concerned with money and honor only by having more of the one or the other. But in fact their difference in magnitude is an elevation toward something beautiful and wonderful rather than something merely good. In a similar way, the magnitude of tragedy, the power of its tragic punch, might only be a question of, say, how long a performance can be, or how complicated a story. These arithmetical factors are relevant to tragic magnitude. But here, too, magnitude also involves an elevation, not just an extension.

As with magnanimity, Aristotle suggests an analogy between the magnitude of a tragedy and the size of living bodies: "What is beautiful, whether an animal or any other thing put together from parts [such as a tragic story], must not only have these parts in order, but also cannot be of just any magnitude. What is beautiful comes about through both magnitude and order. … Just as bodies and animals must have magnitude but still be apt for a synoptic view, so must stories have length, yet still be apt for holding in memory" (*Poetics* 7, 1450b34–1451a6). As was the case with magnificent expenditure, tragic action loses its shape, and so its tragic punch, if it becomes diffuse. But so long as this synoptic unity can be maintained, Aristotle maintains, "the greater story is always, because of its magnitude, more beautiful" (*Poetics* 7, 1451a10–11).

Aristotle makes the connection between the magnitude of tragedy and the elevation of the mega-virtues explicit later in the *Poetics*, in his discussion of epic poetry. "Epic poetry differs from tragedy with regard to length," he says, "though the limit of length previously discussed [for tragedy] is still correct: it must be possible to get a synoptic view of the beginning and end" (*Poetics* 24, 1459b17–20). But he emphasizes that epic poetry has an advantage over tragedy in applying this standard of magnitude, and can achieve greater effects. A tragedy is limited to that action the actors are putting on the stage at a given moment, while the narration of an epic poem can present "many parts at once, with which, assuming the parts are intimately connected, the mass of the poem is augmented." The result of this epic augmentation is much like the result of greater expenditure in the case of *megaloprepeia*: a difference in amount results in a difference of elevation. As Aristotle says, this augmentation "is good for *megaloprepeia*, for provoking change in the listener, and for introducing a variety of episodes" (*Poetics* 24, 1459b27–30). Since Aristotle soon after mentions other resources epic poetry has for producing greater wonder than tragedy (*Poetics* 24, 1460a11), he may well have the specific connection of *megaloprepeia* and wonder in mind in this statement.

Tragedy and epic poetry induce wonder in us, and this is a crucial aspect of the expansion we experience from them. That this wonder is akin to the wonder induced by the mega-virtues is clear enough, too. The thematic accounts of these virtues in *Nicomachean Ethics* 4.2–3 do not suggest that they show themselves under the harsh pressures of a tragic story; indeed, they are presented there as rather the occupation of people living in unusually favorable circumstances. But Aristotle's account earlier in the *Ethics* of how a good man will respond if he falls into misfortune seems to confirm a more intimate connection.

"Even the most prosperous person can fall into great disasters in old age, as is told of Priam in the Trojan stories. No one would deem happy someone who underwent such misfortunes and died wretchedly" (*Nicomachean Ethics* 1.9, 1100a6–9). Priam, king of Troy, lost his sons in the Trojan War, and eventually his city was enslaved and he was killed: a tragic end indeed. That Aristotle uses the example of Priam is obviously intended to put readers in mind of tragedy and epic poetry. He does not want to accept the thesis without amendment, since Aristotle is loathe to concede that a virtuous man could ever truly become wretched. The way he resists this implication suggests that he thought action under tragic circumstances could be a privileged occasion for the manifestation of mega-virtue. Aristotle does concede that "when many things of great magnitude" turn out badly in a life, "happiness is crushed and ruined, since they bring pain and impede many actions [*energeiai*]." But this fall into misfortune, even ruin, does not imply that the one who has fallen has become wretched. "In these very circumstances does beauty shine forth," says Aristotle, "when someone bears with good temper many misfortunes of great magnitude—not out of insensibility to the pain, but by being noble and displaying *megalopsychia*." The terrible circumstances—death of sons, enslavement, ruin—can make the great life force of the noble man all the clearer. The reversal of fortune chastens greatness at the very moment it produces the greatest show of virtue: "The person truly good and of sound judgment bears misfortunes with good appearance, and always acts as beautifully as possible given the circumstances." This impressive show justifies Aristotle's final rejection of the thesis that the virtuous man can fall into wretchedness: "The happy person will never become wretched—not that he would be blessedly happy, if he falls into misfortunes like those of Priam" (*Nicomachean Ethics* 1.10, 1100b25–1101a8).

On the one hand, the mega-virtues seem to be most fully activated and energized when they face the fewest impediments. On the other, they seem to show themselves most resplendently in the horrible struggles and reversals of a Priam or an Oedipus. If we think again of the comparison of the protagonists of tragedy and the competitors (*agōnistai*) in the Olympic Games, we will see this tension between unimpeded greatness and resplendent tragic greatness more clearly. The most successful athlete would be one so dominant that he is never challenged, and who always wins. But our favorite athlete may well be one who faces many reversals and struggles, who wins less often but whose victories are more pleasing to us. Indeed, his losses may be crucial to why the struggling competitor arrests our rooting interest with an intensity missing in the case of the dominant athlete whose success faces few impediments. The dominant athlete may even find he becomes more popular exactly as he ages and his skills wane. Assured dominance can fuel envy, whereas struggling virtue attracts goodwill. We do not project ourselves into the position of a mega-athlete who is never challenged. Could the struggles of the tragic protagonist also catalyze our identification?

Tragedy presents greatness through impeded or even defeated happiness rather than through perfect success. The pity excited by the protagonist's struggles and sufferings tempers the potential envy (*phthonos*) our admiration of the protagonist's excellence might otherwise produce. As Aristotle makes clear in *Rhetoric* 2.8–11, pity and envy are both responses to what is "like us" in the great human being, the first to suffering, the second to success. The tendency to envy great success, Aristotle says, is characteristic of being small-souled (*mikropsychia*: *Rhetoric* 2.9, 1387b34–35). The plot of a tragic story, like the tale of an athlete facing adversity, makes it easier for us to appreciate the mega-virtues with good-willed *megalopsychia*. Tragedy's tempering of envy has an interesting

reflection in the genre of formal praise (*encōmia*). Tragedy has a close kinship with hymns to the gods and *encōmia* for superior human beings (*Poetics* 4, 1448b24–27). Aristotle held the defining task of *encōmia* to be praising human virtue, rather than honoring divine happiness and success. (*Nicomachean Ethics* 1.12; the discussion of hymns and *encomia* immediately follows the discussion of Priam, exemplary of epic and tragedy.) The gods, along with divinely favored heroes whose happiness is beyond mar or challenge, are properly the subject of hymns that honor them for their perfection. We can give this honor to gods and heroes unstintingly, for they are not "like us," and their magnification does not excite our envy. Human virtue, by contrast, deserves praise, but not honor, since human virtue is less divine and perfect that assured happiness (*Nicomachean Ethics* 1.12, 1101b21–25). So when Aristotle says that tragedy is akin to both hymns and *encōmia*, he seems to have in mind both a divine aspect of tragedy as honoring the gods—an aspect that plays a very small role or none at all in the rest of the *Poetics*—and the human aspect of tragedy akin to the genre of praise, which focuses on presenting virtue. Tragedy's characteristic plot devices of reversal, recognition, and suffering are the way tragedy can praise and make manifest human virtue by showing it under threat or in defeat—exactly the tragic circumstances where, Aristotle suggested, Priam's beautiful magnanimity will shine forth.

These tragic devices are, of course, different from the techniques the genre of praise will use to defuse envy while it celebrates greatness. Aristotle leaves further discussion of such techniques to "those who make *encōmia* their work" (*Nicomachean* Ethics 1.12, 1101b34–35). Simonides and Pindar, two masters who made the genre of praise their work a century and a half before Aristotle, may well have formed Aristotle's opinion of the connection between tragedy and praise. Both were made famous and rich by powerful and wealthy patrons, and their celebrations of their patrons' successes often included chastening reminders of the dangers of envy. The remains of Simonides' poetry are fragmentary, but Xenophon elegantly captured Simonides' mind when he made the poet offer this concluding counsel in a fictional dialogue with his most powerful patron, Hiero tyrant of Syracuse: "The most beautiful and most blessed of all the possessions of human beings … is to be happy without being envied" (Xenophon *Hiero* 11.15). With Pindar's victory odes, we can see more directly the links between praise poetry and tragedy. A victory ode celebrates a victory in the Olympic Games or other important athletic contests, so Aristotle was following the example of the victory ode when he framed activated virtue by the example of Olympic competitors. The person celebrated was usually the sponsor of the winning competitor, especially in chariot races, not the competitor himself. The greatest glory belonged to the magnificent benefactor of the great victory, rather than to the subordinate functionaries, the trainer, the driver, and the horses. The sponsor-competitors came from wealth and prestige, usually either the dominant ruler in a city (that is, a tyrant), or a powerful citizen whose success in the Games added to his prestige and amplified his political status. Whether the victorious sponsor was an actual tyrant or a private citizen amplifying his power, a victory ode faced an awkward problem: the tension between our admiration for greatness and our envy of it. Pindar composed his celebrations of resplendent greatness with a chastening undertone about the risks of all superior human accomplishment, especially the risk of envy. The successful patron is constantly warned not to go too far and expect to be honored like a god, rather than praised like a human being. These warnings may have a direct effect on the patron, but they also have the effect of allowing the audience to temper its envy, and so to appreciate the victor's accomplishment with goodwill.

In tragedy, too, the protagonist's greatness could excite our small-souled envy rather than our magnanimous goodwill. The threat or reality of the hero's destructive suffering elicits from us a pity that counteracts this smallness: we appreciate and expand into the hero's greatness, as we cheer for the struggling athlete.

Aristotle's treatment of the case of Priam shows how we respond to the mega-virtue displayed in the tragic action. We are spent and exhilarated by the manifestation of human greatness, a greatness shining through the horrible impediments to happy activity that make the tragic story. But this answer to the question of how we experience tragedy is still incomplete. What is the special intimacy with greatness that tragedy provides?

The universal and the exemplary

Aristotle's solution to the puzzle hinges on how we enter into the imitation and identify with the greatness of the protagonist. This mimetic identification must also be an act of cognition and understanding. Aristotle was not wholly successful in finding a vocabulary to describe this distinctive sort of mimetic cognition. But he sees that tragic stories work best when they promote this distinctive mode of cognition. If we merely contemplate the protagonist, and even if we learn an important general truth about human beings from the example on stage, the tragedy has not succeeded. Such contemplative cognition of an example is fundamentally different from identification with a protagonist we take as an exemplar. Contemplative cognition may allow me to understand universal truths about human beings through consideration of a particular example, and since I too am a human being, I will learn something about myself this way. But mimetic cognition is my experience of my own greatness in the greatness of an exemplar, and it issues in the special intimacy of self-knowledge. We study an example, but we embrace an exemplar.

The exemplary tragic protagonist, Aristotle repeatedly insists, must stand above us: "Compared to people now, comedy aspires to imitate worse people, tragedy better" (*Poetics* 2, 1448a16–18). But as with Priam and favorite athletes, our identification with the protagonist is intensified by impediments and even imperfections. It is the work of the characteristic story structures of tragedy—reversal, recognition, and sufferings that provoke pity and fear—to provide this intensification. So there is a delicate interplay between our tendencies to admire the protagonist with goodwill and to envy him. The tragic poet makes the protagonist better than us in his greatness, to raise our standards for our own excellence, and makes the protagonist "like us" in his suffering, to defeat our envy and to attract our identification and projection. Thus Aristotle struggles to say exactly how virtuous the protagonist should be, because he is hesitant to let someone clearly more virtuous than us be threatened with ruin. This hesitation reproduces his ambivalence (in *Nicomachean Ethics* 1.10) about calling a good man like Priam "wretched" even when he falls into extreme misfortune. "Since the way the most beautiful tragedy is put together," he first says, "must be complex [and so involve reversal and recognition], and be imitative of what is fearful and pitiable, it must not show virtuous men changing from good fortune to bad" (*Poetics* 13, 1452b30–35). But he sees this flat statement will not do, since to remove interesting excellence from the protagonist flattens the elevation the protagonist as exemplar must provide. He tries to repair this, saying that while the protagonist should be "the sort of person who is not distinguished [from us] by virtue and justice, nor by vice and vileness," and "who undergoes a change to misfortune caused by a

misjudgment," he should still be distinguished by "great reputation and good fortune" (*Poetics* 13, 1453a7–10). But Aristotle sees that the exemplary power of the protagonist cannot be fully retrieved if his great mega-virtue is displaced by great social status and wealth. And so Aristotle ends up conceding quietly that the tragic exemplar is best when the intrinsic power of his virtue, and even of his misjudgments, display distinguished greatness: "The beautiful story must … involve a change … caused by a *great* misjudgment by someone of this sort [that is, "like us"], or *better than* this sort, but not worse" (*Poetics* 13, 1453a12–17, emphasis added). This conclusion notoriously leaves unresolved how someone of such mega-virtue would also make a mega-misjudgment; but it is to Aristotle's credit that he lets the cracks between *megalopsychia* as virtue and simply as power show through here. Exemplarity cannot quite be moralized.

In the few passages where Aristotle describes the sort of cognition that tragedy and epic poetry promote, he uses language that may seem to assimilate the mimetic cognition of an exemplar to the contemplative cognition of an example. But this appearance is caused by his desire to emphasize the cognitive status of the experience of tragedy, rather than by any real assimilation between the two. For example, he famously ranks the cognitive achievement of poetry above history: "The work of the poet is not to speak of what has happened, but of the sort of things that could happen, plausibly or necessarily. … And so poetry is a more philosophical and significant thing than history: poetry speaks more of what is universal, history more of what is particular. What is universal is what it is plausible or necessary for a certain sort of person to turn out to say or do, and poetry aims at this even though it gives proper names" (*Poetics* 9, 1451a36–b11). The language here can sound as if poetry presents universal truths about causes in the human world (thus the appeal to what is "plausible or necessary") in something like the way philosophy pursues universal causes. On such a reading, these causal truths would be impersonal, applying to connections at the level of qualities, and the poet would give proper names to examples that illustrate them merely to help us keep track of the universal causal relations.

This interpretation is, however, quite misleading. There is, it is true, something impersonal about the structure of a tragic story, which must exclude the merely individual in the service of the tragic effect. For example, a short story may well be inspired by a newspaper article about a real event, but the writer will exclude details that in the article were information, but in the story would be mere accidents. This exclusion of particularity in the service of a synoptic effect is what makes tragedy "universal." But the tragic punch is delivered by a well-structured story of reversal, recognition, and suffering, not through a universal model of causality, not even such a model illustrated with a particular example adorned with proper names. Poetry is "more philosophical" because it organizes itself around a synoptic effect, and the special pleasure we take in this effect. Even though the synoptic and impersonal aspects of this effect are more like philosophy than the episodic narratives of history, the tragic punch also distinguishes the cognitive experience of tragedy from philosophy. That Aristotle is concerned with the exclusion of mere particularity in a good story, rather than with universality as such, is manifest when Aristotle returns to the contrast between story and historical narrative in his account of epic poetry (*Poetics* 23, 1459a21). There he emphasizes the distinctive organization of story elements to produce the punch of pleasure, which must exclude historical facts irrelevant to producing this effect.

The more profound kinship between philosophy and tragedy has less to do with universality—in tragedy's case, this would be better described as the exclusion of indi-

viduality—than it has to do with wonder. Part of tragedy's effect is the wonder induced by surprising but ultimately intelligible causes, imitated in the structures of the story (*Poetics* 9, 1452a1–11). Philosophy, too, finds wonder in making intelligible surprising causal connections. Aristotle exploits this kinship in his account of the basic pleasure of imitation (*Poetics* 4, 1448b4–17). This wonderful pleasure of finding a surprise intelligible is one of the most basic enjoyments humans have, requiring no justification or ulterior purpose (in Aristotle's language, it is *physikon*: natural). Since images and other imitations give us this naturalistic pleasure, we also enjoy imitation in this basic way. A proof of how strong this pleasure is, Aristotle suggests, is that "we enjoy contemplating the most precise images of things that themselves are unpleasant to see, such as the structures of the lowest animals, or of corpses" (*Poetics* 4, 1448b10–12). We are all philosophers enough that the wonderful pleasure of this surprising intelligibility is greater than the discomfort of the sight of the unpleasant things understood. Aristotle expects us to see the analogy: the wonder provoked by tragedy is also more powerful than the discomfort of the pitiable and fearful sufferings that release this wonder.

In this passage, too, there is no real assimilation between the mimetic cognition of tragedy and the contemplative cognition of philosophy. The kinship with philosophic wonder is there, but the difference is also clear. Aristotle gives a general formula, meant to cover both tragedy and philosophy, for the expression of penetrating a wonderful surprise: "The reason people enjoy seeing images is that, by contemplating them, it happens that they learn something and figure it out, of the sort, 'So this one is that one!'" (*Poetics* 4, 1448b15–17). This general formula can turn out to express utterly different experiences of cognition, from the delighted philosopher's "So that's how it works!" to the astonished audience member's "So that's what he did!"

Friendship and mimetic cognition

Aristotle nowhere directly distinguished mimetic cognition from contemplative cognition, nor did he discuss in any detail how we identify with the greatness of a tragic exemplar through an act of mimetic cognition. So an interpretation of Aristotle's aesthetics must be left with some tantalizing open questions. But Aristotle did discuss three related types of identification in his account of *philia*: between a spectator and a virtuous actor; between a magnanimous benefactor and a beneficiary; and between two intimate friends. The Greek word *philia* is usually translated "friendship," though it covers a much wider range of human relationships. These discussions are suggestive of how Aristotle could have pursued the topics of mimetic cognition and of exemplary identification.

Especially striking is Aristotle's account of goodwill (*eunoia*). Goodwill is a kind of idle or disengaged friendship, where we wish people to prosper but without any motive to be actively involved with them or to benefit them. Aristotle illustrates this deactivated interest in another with a spectator at an athletic competition: "Goodwill arises from immediate appearances, as happens with competitors: we come to have goodwill for them and want what they want, but we would not perform actions for them. … In general, goodwill arises because of some virtue or goodness, when someone appears beautiful or manly or some such thing, just as we mentioned in the case of competitors" (*Nicomachean Ethics* 9.5, 1166b34–1167a2, 18–21). Aristotle says nothing about what kind of satisfaction or pleasure the spectator might receive from being arrested by the beauty or manliness of a competitor. This attachment is not the product of the same complex structure as a tragic story, though the dramatic striving of the athlete seems to

be what attracts the spectator's interest. There is an intriguing Aristotelian text (*Problemata* 922b10–27, probably a post-Aristotle product of the Peripatetic school) that applies this conception of goodwill directly to tragedy, to the attitude of the chorus to the protagonists. The passage explains why different musical modes are appropriate for the protagonists and for the chorus: the heroic protagonists need music expressive of magnificence and action, while the chorus needs more sedate music, since the chorus "does not act, but only offers goodwill." If we can follow this line of thought, we can revise the common notion that the chorus models the ideal spectator as a contemplator of the tragic action: chorus and spectator are not mere observers and judges of the struggles of the protagonists, but are attracted by goodwill to experience the protagonists' magnificent actions from the inside, and take on their successes and failures.

The goodwill of the spectator arises in response to the perceived qualities of the competitor. It is not a calculated response, even if upon analysis it is a reasonable one; Aristotle calls this phenomenon, like the enjoyment of imitations, *physikon*. This naturalistic aspect of many features of human relationships interested Aristotle. He is especially apt to see a direct, naturalistic cause when we seem, so to speak, to extend ourselves into the being of another, identifying our interest with theirs. This phenomenon is particularly prominent in benefaction, the characteristic activity of the mega-virtues. When Aristotle considers why benefactors love their beneficiaries more than they are loved in return, he rejects an explanation based merely on calculation of advantage: "The cause [that benefactors love their beneficiaries more than the reverse] would seem to be more naturalistic [*physikon*]." He then gives a fairly technical explanation, hinging on the idea that the benefactor experiences the accomplishment of the beneficiary as his own accomplishment, and so loves the beneficiary as an extension of his own activated self. Aristotle closes this explanation by repeating that this enjoyment of self-extension is "natural" (*Nicomachean Ethics* 9.7, 1167b28–1168a8). Benefaction is unlike goodwill because it is an activated extension of the self into another, whereas goodwill is idle. This self-extension also differs from goodwill because it subordinates the object of its naturalistic interest, the beneficiary, to the benefactor, a subordination shown, Aristotle emphasized, by the benefactor's expectation of gratitude from the beneficiary. Good-willed spectators, by contrast, seem to enjoy excellences that surpass anything of their own. And while spectators may identify to some extent with the athletes they cheer for, this identification is much less substantial than the benefactor's identification with the success or failure of a beneficiary.

An Aristotelian model of naturalistic identification with an exemplar through mimetic cognition would combine the good-willed spectator's non-subordinating but idle interest in a beautiful, powerful competitor, with the benefactor's more intensely personal extension of self into the beneficiary. We could think of experiencing the success or failure of the tragic protagonist on the model of the passion a fan has for an athletic protagonist, while taking those successes or failures to heart as if they were our own, like the benefactor does the action of the beneficiary. Mimetic cognition of a tragic exemplar of mega-virtue would, on such a model, turn out to be essentially different from contemplative cognition of greatness through a theoretical account, even if that account was provided with illustrative examples. Aristotle came closest to an explicit recognition of this difference between mimetic and contemplative cognition in his account of the naturalistic basis of the most intimate friendship.

Aristotle proposes his model of the most intimate friendship to argue against the claim that a fully virtuous person, being self-sufficient and having no needs, would also have no

use for a friend. Aristotle first offers a response based on the self-sufficient person's pleasurable contemplative cognition of a virtuous friend. He proposes that we can contemplate such a friend's actions more easily than we can contemplate our own; since the friend is both intimately our own, and good in himself, this contemplation will have an object that combines two sources of pleasure (being one's own and being simply good); and so such contemplation will be most pleasant (*Nicomachean Ethics* 9.9, 1169b33–1170a4). Here is a model of the contemplative cognition of a friend. Our enjoyment comes from considering the friend as an object of study. It is true that part of our enjoyment of this study is that the friend is our own, so there is a kind of intimacy involved. We might also enjoy studying the excellences of horses, and enjoy this study most of all when studying horses we own. But the pleasure still derives from contemplation.

Contrast this enjoyment with what Aristotle calls a "more naturalistic" explanation of how a self-sufficient person would enjoy a friend: "As the person of mature judgment is related to himself, so is he related to his friend, for the friend is another self. So just as his own good is choiceworthy for each person, so is the good of his friend, or close to it. One's own being was choiceworthy because of perceiving oneself to be good, and this sort of perception is pleasant in itself. Therefore there must be a shared perceiving of the friend's being, and this would arise in shared living and in a community of speech and thought" (*Nicomachean Ethics* 9.9, 1170a13–14, 1170b5–12). This is very close to a model of the mimetic cognition of the friend, directly contrasted with a model of the contemplative cognition of the friend. It is also a model of an intimacy much more intense than what the contemplative cognition of a friend would give us. It is nothing short of a wonder, how close my friend can come to me.

The explanation of how we are drawn to imitations is much like the naturalistic explanation of how my friend can be another self. The structures of a tragic story may enchant the soul as strongly as the conversation of our closest friend. Can this experience of identification in friendship be usefully extended to tragedy? I do not do anything for Oedipus, and so my experience of him in the drama is idle, like the goodwill of the spectator who roots for an athlete. This idle dramatic interest contrasts with the activated interest we take in a friend whom we can and do benefit, extending ourselves into the friend's actions so those actions are also ours. But mimetic cognition of a well-constructed tragedy is wonderful in exactly this respect: it is a vehicle of self-experience, with neither the mere projection and fantasy of the athletic spectator, nor the necessary subordination of a beneficiary to a benefactor. I see through Oedipus an elevation that reveals something of myself I cannot usually experience; and this revelation is given not abstractly as a fact but intimately as exaltation and exhaustion. I go to the theater of Dionysus, in Wallace Stevens' words, to find myself more truly and more strange.

References and further reading

Benardete, S. and Davis, M. (2002) *Aristotle On Poetics*, South Bend, IN: St. Augustine's Press. (This distinctive translation has unusually interesting notes and an appendix with an excellent selection of relevant passages from other Aristotelian works.)

Cunningham, J. V. (1964) *Woe or Wonder: The Emotional Effects of Shakespearean Tragedy*, Chicago, IL: Swallow Press. (Follows the importance of wonder in tragedy from Aristotle through Shakespeare; a minor classic written by a specialist in English literature.)

Ferrari, G. R. F. (1999) "Aristotle's Literary Aesthetics," *Phronesis* 44: 181–198. (A vigorous argument that Aristotle proposes a story-centered rather than audience-centered account of tragedy, with a powerful rejection of all didactic accounts of the experience of pity and fear.)

Halliwell, S. (1986) *Aristotle's Poetics*, Chapel Hill, NC: University of North Carolina Press.
—— (2002) *The Aesthetics of Mimesis: Ancient Texts and Modern Problems*, Princeton, NJ: Princeton University Press. (Halliwell's two books are probably the standard account of a whole range of topics concerning the *Poetics*, and are also a fine bibliographic resource. He defends a version of the sort of didactic views of pity and fear that Ferrari and I reject, but with an unusually judicious restraint.)
Janko, R. (1986) *Poetics I*, Indianapolis, IN: Hackett Publishing. (This is a useful, quite literal translation, with many helpful notes on details of the text. It promotes a particularly intellectualizing account of the effect of tragedy on the audience.)
Jones, John (1980 [1962]) *On Aristotle and Greek Tragedy*, Stanford, CA: Stanford University Press. (A classic account of the priority of action to character in the *Poetics*, written with verve and a rare talent for striking illustration of its main claims. Like Cunningham, a minor classic, written by an English literature specialist rather than a philosopher or classicist, and so perhaps rather underappreciated in the scholarly literature.)
Konstan, D. (2006) *The Emotions of the Ancient Greeks*, Toronto: University of Toronto Press. (A thoughtful, systematic working out of the emotions as conceived by Aristotle, especially in the *Rhetoric*, but with constant relevance to the *Poetics*.)
Kurke, L. (1991) *The Traffic in Praise: Pindar and the Poetics of Social Economy*, Ithaca, NY: Cornell University Press. (The chapters on the connections between magnificence and envy, as worked out in the genre of the victory ode, enlighten a whole range of topics in Aristotle, even though he is rarely Kurke's focus.)
Lear, G. R. (2006) "Aristotle on Moral Virtue and the Fine," in R. Kraut (ed.) *The Blackwell Guide to Aristotle's Nicomachean Ethics*, Malden, MA and Oxford: Blackwell: 116–36. (An excellent account of the *kalon* (beauty, here translated by "the fine") in Aristotle's moral thought, focusing on order, by contrast to my focus on greatness.)
Lear, J. (1999) "Catharsis," in *Open Minded: Working Out the Logic of the Soul*, Cambridge: Harvard University Press: 191–218 (originally published in *Phronesis* 33 (1988): 297–326). (In my view, the deepest reflection on the audience-centered interpretation of the effect of tragedy that Ferrari and I reject.)
Lord, C. (1982) *Education and Culture in the Political Thought of Aristotle*, Ithaca, NY: Cornell University Press. (Focused on Aristotle's discussion of the place of music in civic education in the fragmentary final book of the *Politics*, this book is especially interesting in the links it explores between philosophy and magnanimity.)
Nietzsche, F. (1999 [1872]) *The Birth of Tragedy and Other Writings*, New York: Cambridge University Press. (The most important alternative to Aristotle's *Poetics* ever written, whatever youthful flaws it may have—Nietzsche was 27 years old when it was published.)
O'Connor, D. K. (1999) "The Ambitions of Aristotle's Audience and the Activist Ideal of Happiness," in R. C. Bartlett and S. D. Collins (eds.) *Action and Contemplation: Studies in the Moral and Political Thought of Aristotle*, New York: SUNY Press: 107–29. (A systematic account of how Aristotle's *Nicomachean Ethics* both promotes and moderates the view that action and *energeia* define human life.)
Sachs, J. (2005) *Aristotle Poetics*, Newburyport, MA: Focus Publishing/R. Pullins Co. (The introduction to this translation has a short but stimulating account of the importance of wonder in tragedy, indebted like my own to Cunningham.)
Shiffman, M. (2005) "Shaping the Language of Inquiry: Aristotle's Transformations of the Meanings of *thaumaston*," *Epoche* 10: 21–36. (A broad and penetrating reflection on the place of wonder (*thaumaston*) in Aristotle's writings, especially the *Metaphysics*, but with much of relevance to the *Poetics*.)

Related chapters

12. Plato: moral psychology
13. Plato on virtue and the good life
17. Plato's *Poetics*
21. Aristotle: psychology
24. Aristotle on the good life
25. Aristotle on the political life
42. Plotinus

Part IV

HELLENISTIC PHILOSOPHY

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HELLENISTIC PHILOSOPHY: PLACES, INSTITUTIONS, CHARACTER

James Warren

The Hellenistic period of ancient philosophy is generally taken to begin with the death of Aristotle in 322 BC (just a year after the death of Alexander the Great) and to last until the death of the final Ptolemaic ruler in Egypt, Cleopatra, in 30 BC. In many ways these two events are helpful markers of some of the important changes that took place in philosophy over those three hundred years since they show the rise of Roman power and influence, both politically and intellectually, and also the dispersal of philosophy from a concentration in Athens during the Classical period to a Mediterranean-wide diffusion of centers of philosophy by the end of the first century BC.

The Hellenistic period is also the point at which there emerges a more settled notion of a philosophical "school." Although Plato's Academy and Aristotle's Lyceum might be thought of as philosophical schools of a sort, in the Hellenistic period there developed the sense of different competing philosophical orthodoxies, each of which offered more or less comprehensive philosophical accounts of the natural world, of logic and epistemology, and ethics. These dogmatic schools of thought each acquired a more or less rigid institutional form, with agreed heads or "scholarchs" and a relatively formal procedure for settling the succession on the death of each head. The two major dogmatic schools are, of course, the Stoics and the Epicureans. But it is important to remember that alongside these two there remained various other smaller philosophical movements (for example, the Cynics and Cyrenaics) as well as what remained of Plato's Academy and the Peripatetics.

Our primary evidence for the philosophical ideas and developments of the time is patchy. For the early Hellenistic period and the early history of many of the schools we have only brief quotations and reports preserved in later authors. Only for Epicureanism do we have any reasonable volume of primary texts from the early period, fortunately preserved either in the biography of Epicurus that closes Diogenes Laërtius' third-century AD *Lives and opinions of the eminent philosophers* or in the remarkable library of the Villa of the Papyri at Herculaneum, buried by the eruption of 79 AD. Later in the period, we have the works of Cicero and Lucretius and have rather more information about the philosophical atmosphere of the first century BC but, for the most part, historians of

the philosophy of this era have to rely on using partial and indirect evidence to produce a careful reconstruction of each school's views and the various debates between the different schools. For much of the time, we learn about earlier philosophical developments through the eyes of later authors, who often report and discuss those views with their own argumentative and critical agendas in mind. Very rarely is there any transparent window on to the philosophical life for the period between the end of the fourth and the early second century BC, when the foundational moves in Hellenistic philosophy were being made.

Despite such reservations, it is reasonable to think that we have some reliable conception of what philosophical life was like at that time. The early Hellenistic period of philosophy is continuous in important ways with the preceding Classical period. The main initial center of activity was still Athens and the influence of the great classical philosophers was still keenly felt. Many of the developing philosophical movements explicitly traced their roots back to Socrates, even if the picture of Socrates they were working with was taken to a large extent from Plato's dialogues. Indeed, the variety of that depiction is perfectly in keeping with the variety of the Hellenistic Socratic schools. Some of them, for example the Stoics, developed a philosophy that emphasized the possibility of knowledge about the world, the divine benevolent government of the cosmos, and the centrality to the good life of the acquisition and practice of virtue: all facets that can be traced without too much difficulty to Plato's Socrates. On the other hand, the Academy itself under first Arcesilaus and then Carneades took their "skeptical" approach to be Socratic too: they emphasized Socrates' regular practice of arguing for and against a position and of leading an interlocutor to see the inconsistencies and problems with his own position. These traits are clearly visible in some of Plato's works and it is not an implausible interpretation of the "Socratic method."

The Stoics and Academics were therefore clearly in some sense in competition with one another, both over the legacy of Socrates and over genuine and important philosophical issues such as the possibility of knowledge. Their complex and detailed engagement with one another allows us to appreciate a further characteristic of the early Hellenistic period of philosophy, namely that it remained at this period to a large extent the business of a close community of intellectuals who were well-informed about one another's views and, in all likelihood, engaged in close and detailed, probably face-to-face, debate with one another. The increasing development of distinct schools did not lead to an insulation of the different outlooks. It is perhaps difficult to appreciate fully the depth and complexity of the inter-school dialectic but there are some clear signs of its sophistication in the sources. For example, Cicero's work *Academica* (itself a rather complicated artifact since what we have comprises parts of two different versions of the work) shows that the debate between the Stoics and the Academics over the possibility of attaining knowledge via that apprehension of certain infallible impressions (*phantasiai katalēptikai*) evolved over at least the first two generations of the schools and involved a close knowledge by all the parties involved of each other's philosophical stance. This is a characteristic to be expected of a close-knit philosophical world in which argument and counter-argument could be offered rapidly and in the sure expectation of a swift response. Cicero's *Academica* also demonstrates how our evidence for the earlier Hellenistic period is often difficult to interpret: although Cicero is closer in date to the original Stoic–Academic skirmishes (closer by some way than our other major source, for example: Sextus Empiricus from the second century AD) even he presents

the philosophical landscape as an already mature and complex battle-ground with many layers of argument and response lying on top of the third-century BC positions. Indeed, for Cicero—who considered himself to be an adherent of the Academy—there are some important very recent developments in the story from the latest generation of members of his school.

The upshot of this obviously vibrant and long-running debate is that it is a challenging task to untangle the various positions from either side and to tease out the full story of just this one set of discussions. The intertwined histories of the various schools compound this difficulty. It was quite common for people to spend time studying with adherents of more than one school before either opting for one particular dogmatic position or else attempting to combine more than one. For example, Antiochus of Ascalon studied both with the Stoic Mnesarchus and then with the Academic Philo of Larissa. It is perhaps not surprising that he later attempted to re-found an Academic position claiming that he was an adherent of the shared view of Plato, Aristotle, the Stoics, and the later Academics. Such a position should not be thought of as particularly conciliatory, however. His claims to have renewed the school by bringing it back to its foundational position are just as likely to be polemically aimed at other contemporary Academics, including the more skeptically-inclined Philo. This is not an uncommon pattern: the schools were often subject to rifts and breakaway groups (consider, for example, Aenesidemus' split from the Academy in the first century BC to found the more radically skeptical Pyrrhonian movement) and such schisms were as often justified on the basis of reasserting some original position as by claims of philosophical innovation. In fact, explicit innovation tended not to be emphasized. The gravity of the philosophical past was such that the prevalent rhetoric was one of orthodoxy and respect for the original intentions of the earlier philosophers.

It is perhaps a consequence of this volatile situation and of the level of debate between and within different philosophical schools that, over time, there developed a more or less settled philosophical terminology. In part, the general acceptance of some kind of shared vocabulary was a practical necessity since it enabled a relatively clear means of comparison and dissent between the different views. This development was likely further encouraged by the characteristically Academic practice of arguing that some ostensibly distinctive position could be shown in fact to collapse into one or other previously advocated view (for example: that the Epicurean conception of the highest pleasure in fact is identical either to Cyrenaic hedonism or to Hieronymus of Rhodes' advocacy of painlessness as the ideal state). Over time, terms such as the Greek "*telos*" for the goal of life and the ultimate aim of our actions and desires or "*phantasia*" for a sense-impression became common currency between the different schools.

Over the three hundred years of the Hellenistic period it seems that although the practice of interpersonal debate and philosophical interaction never disappeared (think, for example, of the conversations depicted in Cicero's philosophical dialogues) there also developed what we might call an increased "textualization" of philosophy. The Hellenistic philosophers were often prolific writers, particularly those from the dogmatic schools, and the development over time of a corpus of Stoic and Epicurean texts encouraged a second generation of interpretation and commentary. We even know in the Epicurean school of a practice of philological discussion and debate over the text of Epicurus' own works since interpretations and, importantly, school orthodoxy often depended on a particular understanding of what came to be seen as foundational texts. This trend also affected the reception of classical texts since, by the end of the Hellen-

istic era, the Platonic corpus had begun to be codified and organized in a process that eventually produced, for example, the tetralogies of Thrasyllus of Mendes in the first century AD. Although the precise story of the supposed loss and then recovery of Aristotle's esoteric, or 'school' texts (the texts we have today and which form the basis of our primary understanding of his philosophy) is somewhat debatable, here too is evidence of a clear interest by the end of the era in the collection and organization of bodies of "classic" philosophical texts.

This process was accompanied by a growing interest in cataloguing and recording the history of philosophy and the history of various philosophical schools. A genre of *diadochai*—successional lists of philosophers detailing lines of influence and teacher–pupil relationships—was well developed relatively early in the Hellenistic period and seemed to reflect an interest in tying contemporary philosophers back through to Presocratic originators. This was combined with a growing interest in intellectual biography and an increasing drive on the part of the various philosophical schools to record their own histories and the lives of their founders. From the end of the Hellenistic period we have remains of Philodemus the Epicurean's *Catalogue of Philosophers* (*Syntaxis tōn philosophōn*) in the form of parts of his catalogues of the Stoics and the Academics, and it is clear that this work combined doxographical and biographical details. Such works were obviously rather helpful as time progressed and the histories of the schools became more complicated by generational schisms, breakaway heterodoxies, and contested interpretations of the central tenets of the movement.

Texts and what we might call "meta-texts"—commentaries, catalogues and the like—were clearly extremely important to philosophical practice and identity in this period. Indeed, the story of the recovery and removal to Rome of Aristotle's library by the Roman general Sulla in 84 BC is, whatever its veracity, an important emblem of perhaps the most profound change in philosophy to take place over the Hellenistic period. The rise of Rome as a Mediterranean power and its eventual control of Greece, Asia Minor, and the North coast of Africa had a significant impact on Athens' previously unassailable claim to be the natural home of philosophy. This is a debatable claim in itself, of course, and perhaps true only for the later fifth and fourth centuries BC; previous influential philosophers had come from Asia Minor and Magna Graecia as well as elsewhere in mainland Greece and had not, it seems, all thought it necessary to move to work and win a reputation in Athens. It is worth remembering, moreover, that even under Roman control, Athens remained an important cultural and philosophical center and many elite Romans such as Cicero spent time there acquiring what was thought to be a proper and authentic philosophical education.

Quite apart from the political changes brought by the Roman conquest of Greece this period marks the beginning of a Latin tradition of philosophical writing and discussion. As Romans began to explore the Greek philosophical legacy and various Greek intellectuals moved to Italy there was a fertile exchange of ideas between the two cultures and languages. The most obvious great productions of philosophy in Latin are, of course, from the first century BC: Cicero's philosophical works, which included translations into Latin from Greek authors, particularly Plato (we have parts surviving of his translation of the *Timaeus*) and the great Epicurean hexameter poem *De Rerum Natura* by Lucretius. Both show that by this time the relationship between Romans and the Greek philosophical past was already quite mature. Elite Romans would have been able to read philosophy in Greek but there was an emerging confidence in the possibilities of genuine and novel Latin contributions to philosophical inquiry. For example, although

there is no doubt that Lucretius is deeply indebted to Epicurus and, more likely than not, used Epicurus' own *On Nature* as the principal model for the philosophical content of his poem, the work itself opens with a resoundingly Roman invocation of the goddess Venus, goddess of love and—most important for the hedonist Epicureans—pleasure and ancestor of Aeneas, the legendary founder of Rome. And Lucretius was certainly not the first writer of Epicurean texts in Latin. There is good evidence that there were relatively popular prose treatments of Epicurean philosophy available at this time, although Cicero acidly notes that they were so incompetent that he was obliged to write his own superior accounts (*Tusc.* 1.6, 4.6).

The landscape of philosophical vocabulary underwent a further change when Roman authors began to search for Latin words to function as equivalents for the Greek philosophical concepts they wanted to appropriate and discuss. The first century BC was a time of significant innovation in this respect, led in particular by Cicero, whose works had an enormous influence in transmitting the ideas of Hellenistic philosophy to later eras. What is most significant, however, is how the various Latin authors are often explicitly self-conscious about offering candidate translations; evidently, the translation of Greek philosophy into a new language was itself recognized as an important and difficult task.

An earlier episode in the history of the Roman reception of Greek philosophy elegantly illustrates some of the important characteristics of the story of philosophy in the Hellenistic period. In 155 BC the heads of the Stoa (Diogenes of Babylon), the Academy (Carneades) and the Peripatos (Critolaus) came to Rome to negotiate terms concerning a fine that had been imposed by Rome on Athens. First, it is clear by now that these various schools had an internationally recognized status and also might view each other as in some sense philosophical colleagues, whatever their local intellectual disputes. Second, Athens has by now become identified sufficiently with a philosophical pedigree that these three, none of them originally Athenian, could serve as ambassadors of the city to Rome. Alongside their official political duties, the three were able to conduct various philosophical lectures. Most famously, Carneades the Academic argued on consecutive days first in favor of and then against justice. Our sources remark that the Roman audience was sufficiently scandalized that the elder Cato argued for the philosophers' swift return to Greece.

Whatever the historical truth of the details of the anecdote, it clearly shows that the story of the Roman reception of Greek philosophy is complex and gradual. There were certainly aspects of the philosophical heritage the Romans encountered (such as, for example, the Academic practice of arguing for and against any given thesis) that may well have been initially inimical to some Roman sensibilities. But other aspects, for example the Stoic emphasis on the necessity and sufficiency of virtue for happiness, may well have been much more easily fitted into pre-existing Roman concerns. Clearly, finding and negotiating a place for the evidently important and culturally valuable contributions of Greek intellectuals within Roman society was no simple matter. Some of the ideas they found were potentially highly disruptive: Epicureanism, for example, seems always to have been a slightly suspect choice of philosophy for a Roman since it advocated an avoidance, as far as possible, of public life and a concentration on leisure and pleasure. What is clear, of course, is that by the end of the Hellenistic period some degree of accommodation and evolution had taken place such that the scene was set for a continuing Roman interest in Greek philosophy, and an on-going philosophical tradition of writing in both Greek and in Latin.

It would be wrong, however, to think that the period saw a simple transfer of philosophical influence from Athens to Rome. The picture that emerges is rather of a process of diffusion: Athens remained the base for many philosophers and retained a cultural prestige even among Roman intellectuals but there emerged also various other centers of philosophical enterprise and influence. This process began relatively early in the period. Even in the lifetime of Epicurus himself, for example, there were various groups of Epicureans around the Mediterranean who were linked with the Athenian Garden by various forms of correspondence and exchange. We have good evidence from Philodemus' works that sometimes there were significant doctrinal disagreements between the various groups of Epicureans and the debates between them could often become quite heated. A little later, in the latter half of the second century BC, the Stoic Panaetius seems to have divided his time between Athens and Rome while his most famous pupil, Posidonius, did not become scholarch in Athens but instead set up a separate school on the island of Rhodes. Alexandria too was throughout this period an important center for many kinds of intellectual pursuit, including philosophy. When Athens was sacked by the Roman general Sulla during the first Mithridatic War (87–86 BC), Philo of Larissa, then head of the Academy, fled to Rome (Cicero *Brutus* 306). This episode probably marks the final stage of an already well-advanced process of dispersal that had been taking place for at least a hundred years or more. Although Athens never entirely lost its philosophical importance, it could certainly no longer lay claim to its earlier hegemony.

Further reading

There are collections of sources for the major Hellenistic Schools in A. A. Long and D. N. Sedley (1987) *The Hellenistic Philosophers*, Cambridge: Cambridge University Press, and B. Inwood and L. Gerson (1997) *Hellenistic Philosophy: Introductory Readings*, Indianapolis: Hackett. K. Algra et al. (eds.) (1999) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press, contains detailed discussions of the philosophy of the period. D. N. Sedley (1980) "The protagonists" in M. Schofield et al. (eds.) *Doubt and Dogmatism*, Oxford: Oxford University Press: 5–19 is a brief historical introduction to the philosophers of the period. See also M. Hatzimichali (2012) *Potamo of Alexandria and the Emergence of Eclecticism in Late Hellenistic Philosophy*, Cambridge: Cambridge University Press, ch. 2, for a brief account of the intellectual life of Alexandria at this time. For the reception of classical philosophy in this period see the essays collected in M. Schofield (ed.) (2013) *Aristotle, Plato, and Pythagoreanism in the First Century* BC*: New Directions for Philosophy*, Cambridge: Cambridge University Press.

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Related chapter

37. Philosophy comes to Rome

28
CYNICS

Eric Brown

What was a cynic?

We know what a cynic *is*. A cynic is quick to find fault, and especially to impute selfish motives. Or as a cynic would say, a cynic "sees things as they are, not as they ought to be" (Bierce [1906] 2000: 47). But that does not answer my question. The word "'cynic"—like "epicure," "stoic," and "skeptic"—comes from an ancient Greek label for a certain sort of philosopher. What kind of a philosopher *was* the capital-C Cynic?

The answer to this question lurks in a spotty historical record. We do not possess the writings of any early Cynics, and the later writings by or about Cynics are clouded by motives other than historical truth. As a result, it is not entirely clear who the Cynics were, including even who the first Cynic was, and it is not entirely clear what the content of Cynic philosophy was, including even whether Cynicism was a philosophy. So we have work to do to identify the Cynic. It will take five steps, starting with an overview of the historical record.

The evidence

Several ancient texts portray a Cynic or Cynicism at some length. These fuller sources give us a toehold. Since they identify figures and themes as Cynic, we can then expand our search and find these same figures and themes in a range of other, sometimes glancing, references. Unfortunately, the fuller sources do not provide undistorted and direct portraits of Cynics or Cynicism. They postdate the fourth-century origins of Cynicism by centuries, and their authors, not one of them unambiguously a Cynic, manifest a variety of motives.

The fullest source is Diogenes Laërtius' *Lives of Eminent Philosophers*, probably from the third century AD. Book Six presents swarms of anecdotes about individual Cynics, including especially Diogenes of Sinope (Diog. Laert. 6.10–81), and it gives only a few lines directly to Cynic doctrines (Diog. Laert. 6.103–105; cf. 6.70–73). Those lines about Cynic doctrines also raise questions. Diogenes Laërtius presents the Cynics as heirs of Socrates, through his pupil Antisthenes, and as teachers of Stoics, and the more doctrinal passages in Book 6 (esp. 103–105) overlap considerably with Stoic doctrine reported in Book 7. This raises questions about the extent to which Diogenes has "Stoicized" the Cynics (Fritz 1926, Mansfeld 1986).

Stoicism also potentially infects the Cynicism presented by two students of the Stoic Musonius Rufus (first to second centuries AD). Dio Cocceianus, also called Dio Chrysostom, wrote several orations (4, 6, 8–10) that describe the Cynic Diogenes of Sinope

as an ideal philosopher and model for kingship, and two discourses (3.22 and 4.8) of the Stoic Epictetus contrast those who pretend to be Cynics by wearing a uniform characteristic of Cynics and those who really are Cynics, who closely resemble Stoics.

Other portraits of the Cynic make him look not like the Stoic merely but like the paradigmatic philosopher more generally. Maximus of Tyre (second century AD) presents Diogenes the Cynic as the one person in a corrupt age whose life resembles those of the Golden Age (*Or.*36). And in two orations (6 and 7) that contrast the true Cynic with mere posers, the emperor Julian "the Apostate" (331–363 AD) says that the true Cynic manifests the one set of pious commitments that all genuine philosophers share.

Two other extended sources do not show as much Stoicism or idealization, but their authors are unknown. One is the satirical drama *The Cynic*, which has been transmitted together with the works of second-century AD comedic author Lucian of Samosata. Most scholars think that Lucian did not write *The Cynic* but, whoever the author was, "Pseudo-Lucian" offers a rich portrait and, unusually, some *arguments* for Cynic commitments.

Even more intriguing is a set of letters that purport to have been written by the Cynics Diogenes of Sinope and Crates. These accompany other letters that also voice Cynic themes though they purport to have been written by famous non-Cynics, including Anacharsis, Socrates, and some of Socrates' followers. All these letters, it is universally agreed, are unlikely to have been written by their purported authors. Each purported author's set of letters shows a diversity of styles, and strong connections between the letters in distinct sets suggest common authorship of letters attributed to distinct authors. Based on the style of the letters, scholars speculate that some might have been written in the third century BC, others as late as the second century AD, but it would be a mistake to give much credence to these speculations, especially about the earlier dates, since later authors can imitate earlier styles. Still, although the actual authors of the letters are unknown, we might presume that they were written to spread Cynic advice, and so written by people sympathetic to Cynicism. So we might take the letters by "Pseudo-Diogenes" and "Pseudo-Crates" to record some ancient thoughts about the Cynic's commitments.

Despite the difficulties of these sources, some consistent names, stories, and themes do emerge for a reckoning of Cynicism. Then, if we seek for these names and stories, we can find much more evidence, including Plutarch (including his *Life of Alexander*), Stobaeus, and other anthologies. If we broaden our search a bit more and look for Cynic characters and tropes, we can find them in a wide range of literature, from the edifying to the comedic. Lucian, for instance, regularly plays Cynics for laughs.

Once we have a mass of evidence, we then face the difficult task of determining which is reliable and which not. This is a frustrating task, as many of the anecdotes, quotations, and paraphrases represent a Cynic as the paradigmatic philosopher or as something very close to a Stoic. Indeed, some of the anecdotes are told, almost verbatim, about other philosophers, too. We can be especially skeptical about Epictetus, Julian, and the parts of Diogenes Laërtius that report near-Stoic Cynic doctrine. But this may not be skepticism enough, for even our sources that are not obviously trying to Stoicize or idealize Cynicism might borrow from other reports that did. On the other hand, we run the risk of being too skeptical. After all, it should not be surprising if the Cynics had some paradigmatically philosophical commitments or if they did in fact resemble Stoics in certain ways.

Who were the Cynics?

The evidence for Cynicism does not tell of any formal school, such as Plato's Academy or Epicurus' Garden. But it does reveal a host of figures, some historical and some fictional, all of them linked somehow as Cynics.

The central link, according to all the evidence, was Diogenes of Sinope (roughly 405–322 BC). His life is shrouded in overlapping legends, but we can choose to embrace the legends as the portrait of the prototypical Cynic (see esp. Diog. Laert. 6.20–69 and 73–79). Diogenes may or may not have been exiled with his father from Sinope for adulterating the currency—though Diogenes "admitted" doing this in his *Pordalus* (Diog. Laert. 6.20), he might have been creating a legend, for reasons we will see below—but he clearly spent the rest of his life as a wanderer who embraced physical hardship and poverty, seeking shelter in a tub, wearing a simple cloak folded double, and carrying a staff and a small wallet. He gained fame for his wit, which could be scathing and crude, and for his shameless willingness to urinate, expectorate, and masturbate without regard to the usual proprieties. He also showed bold independence, standing up to Alexander the Great and living his life as a man without a city. But Diogenes was not merely a strange character; he also wrote several philosophical works and tragedies (Diog. Laert. 6.80). Unfortunately, none of these survive, though the Epicurean Philodemus discusses Diogenes' *Republic* in his *On the Stoics*.

Given his centrality to all the accounts, it is natural to suppose that Diogenes was the first Cynic, the one who first attracted or claimed the label of "Dog-like" (Greek *Kunikos*, Latin *Cynicus*) for his shameless ways (cf. Diog. Laert. 6.61). But some ancients disputed this (Diog. Laert. 6.13), and Diogenes Laërtius actually gives the honor to Antisthenes of Athens, an associate of Socrates (Diog. Laert. 1.19, 6.2). In recent decades, Antisthenes' claim has been widely doubted. While there is no reason to doubt that Antisthenes anticipated elements of Cynicism and indirectly influenced Diogenes, there are reasons to doubt that Antisthenes was called a Cynic and that he directly taught Diogenes. Moreover, the evidence for these claims is weak and well explained by their authors' desire to craft a connection between Socrates and the Stoics, through Antisthenes and Diogenes (Dudley 1937: 1–16 and Giannantoni 1990: 4:223–233; but see also Goulet-Cazé 1996, Döring 1995, and McKirahan 1994).

Other Cynics appeared in the century after Diogenes. Some were more or less directly his followers. The most famous, Crates of Thebes, is remarkable as one half of a philosophical marriage. He allegedly presented himself to Hipparchia by dropping his cloak and announcing, "This is your bridegroom, this his property; choose accordingly" (Diog. Laert. 6.96). Crates is also credited with converting Hipparchia's brother Metrocles of Maroneia to Cynicism by some well-timed flatulence (Diog. Laert. 6.94). In addition, several literary lights of the third century BC also show the influence of Cynicism and especially Cynic wit. The court philosopher Bion of Borysthenes' Cynic-influenced work inspired the traditions of diatribes and satire; the Cynic Menippus of Gadara wrote satires in a combination of prose and verse; and Cercidas of Megalopolis devised metrically and lexically innovative poetry that displayed Cynic themes.

There was another flowering of Cynics in the first and second century AD, a period (sometimes called the "Second Sophistic") of revived interest in rhetoric and especially declamations. Dio Cocceianus, Epictetus, and Maximus of Tyre, among others, identified with a Cynicism of strong independence, and portrayed Diogenes the Cynic as the model of self-sufficient, kingly existence.

All of these people seem to be defined as Cynics or as close to Cynicism by some relation to Diogenes of Sinope. By the time of the Roman Empire, that relation is merely resemblance, as Epictetus and Julian contrast those who merely seem to be like Diogenes with those who are really like Diogenes. But Epictetus and Julian suggest that being really like Diogenes requires being really like a Stoic or really like being every other true philosopher. If Cynicism is a distinctive philosophy and Diogenes is the paradigmatic Cynic, what does it take to be really like Diogenes?

The Cynic's way of life

The evidence gives us very little in the way of philosophical theorizing or argument that might constitute the core of Cynicism. The evidence is instead dominated by anecdotes and apothegms. This suggests that one becomes like Diogenes not so much by grasping some theses and reasons as by behaving like Diogenes. There is no school with texts to study or special intellectual skills to master. There is practical training to take up, and advice to follow.

It is tempting, then, to say that Cynicism is not a philosophy, but merely a way of life (Diog. Laert. 6.103). This is not quite right, however. First, *any* way of life manifests commitments fit for examination, and any consciously adopted approach to living is, in at least one sense, a philosophy, because it represents a take on how at least practical matters fit together. Additionally, some philosophies in this sense are worth examining because some people have developed their way of life with care and intelligence. There should be no doubting Diogenes the Cynic's care and intelligence. He plainly gave much thought to questions of how to live, and his Cynicism deserves recognition as a philosophy (for example, Diog. Laert. 6.58, 64, 65). Thus, more than superficial imitation of Diogenes requires grappling with the commitments central to his Cynic way of life.

This sets the interpretive task. We can examine the anecdotes to find the commitments they reveal, and then we can consider how these commitments relate to each other, to reconstruct the careful thought that Diogenes might have used but that the historical record does not much preserve.

As it turns out, the various commitments manifested by the anecdotes can all be linked to three central theses. First, success in life depends on the virtue or excellence of one's soul; second, this success is a special achievement, requiring hard work; and third, virtue and success require a deprecation of mainstream values, such as wealth, fame, and ordinary political power. The Cynic shares the first two commitments with Socrates and all the other philosophers in Socrates' wake. The third is shared by most Socratics, but not all; just think of Aristotle.

So understood, the central commitments of Cynicism are widely shared among Greek philosophers. Still, the anecdotes portray the Cynic as a distinctive kind of philosopher. Cynicism's distinctiveness can be understood as a series of wrinkles in its three central commitments. First, it adopts an especially austere conception of virtue or excellence of the soul for a distinctive view of success; second, it encourages an especially ascetic and unintellectual training program; and third, it manifests an especially extreme opposition to conventional values.

First, then, the Cynic seeks virtue characterized by endurance (*karteria*, *karterikon*) and self-mastery (*enkrateia*) (Ps.-Crates *Ep*.15). Frequently, Cynic self-mastery is so complete as to be characterized as the absence of passions (*apatheia*) (Ps.-Diog. *Ep*.5,

12, 21, 29, 47, 50; Dio Chr. 9.12; Epict. *Dis.* 3.22.13; Julian *Or.* 6.192a). While these characterizations might be conflating the Cynics with the Stoics, it is not hard to think that Diogenes too genuinely favored freedom from passions, since Cynics are so often represented loudly deprecating erotic love, fear of death, and pleasure. Socrates, too, can be associated with endurance and self-mastery (esp. Xen. *Mem.* 4.5 with Dorion 2003) or even "apathy" (Diog. Laert. 6.2). But the stories make the Cynics relentless in their attack on passions and especially pleasure.

The difference between Socrates and Diogenes on this score is not entirely one of degree, either, since the anecdotes fill out the austerity of Cynic virtue by the way in which they characterize why and how one should pursue virtue.

Some texts characterize the ultimate Cynic goal as general success or happiness (*eudaimonia*) (Ps.-Crates *Ep.* 6, 13, 31; Ps.-Diog. *Ep.* 34.3, 37.4, 37.6; Julian *Or.*6.193d, 194e), but freedom (*eleutheria*) and independence (*autarkeia*) are the more characteristically Cynic payoffs of virtue (Diog. Laert. 6.71; Max. Tyr. 36.5–6; Julian, *Or.* 6.195c–197a). Both freedom and independence can be characterized as freedom from need, and perhaps the most secure way of freeing oneself from need is to reduce one's needs to a bare minimum (Ps.-Crates *Ep.* 7; Ps.-Lucian *Cynicus* 12). For the Cynic, then, philosophy prepares for every happenstance (Diog. Laert. 6.63) and has few needs (Ps.-Diog. *Ep.* 48), and by living this philosophy, the Cynic is maximally free. Indeed, Dio Cocceianus says that *only* Diogenes the Cynic is free (Dio Chr. 6.34).

To earn austere virtue and the freedom and independence it brings, the Cynic commits to hard training (*askēsis*) (Diog. Laert. 6.70; Ps.-Crates *Ep.* 12), not just of the mind but also of the body (Diog. Laert. 6.70; Ps.-Crates *Ep.* 20; Ps.-Diog. *Ep.* 15). Indeed, as noted above and as we will consider again below, the Cynic goes without school-based intellectual training. But Cynics insist that the mind must grow used to harsh conditions to be free from soft desires and fear. Somewhat paradoxically, only by undertaking labor (*ponos*) that avoids ordinary pleasures can the Cynic experience stable, free pleasure, and freedom from suffering labor (Diog. Laert. 6.71; Ps.-Diog. *Ep.* 37.6; Ps.-Crates *Ep.* 9; cf. Dio Chr. 8.11–16, 9.11–12). To avoid pleasure and embrace hard work and training, the Cynics welcome poverty. That is why the Cynic is associated so strongly with the "uniform" of a double-cloak and a few possessions easily carried (the staff, the wallet) (for example, Diog. Laert. 6.22–23, Ps-Lucian *Cynicus*), and with the simple shelter of a tub. It is why Crates is supposed to have said to Hipparchia that he owned only his body. According to another common anecdote repeated in slightly different ways, when he saw a child drinking from his hands, Diogenes discarded his cup, to simplify his life still further (Diog. Laert. 6.37; Ps.-Diog. *Ep.* 6, 13). Indeed, the Cynic commitment to simple poverty goes so far as to embrace begging for sustenance (Ps.-Diog. *Ep.* 10, 11, 33.2–3, 34; Ps.-Crates *Ep.* 22, 36).

In antiquity, the Cynic's training regimen, to cultivate austere virtue and to achieve freedom and independence, was called the "short road" to philosophy and success, contrasted with the longer road that involves more intellectual training (Diog. Laert. 6.104). The distinction was probably first drawn to differentiate the Cynic's training from the Stoic's. But Cynics appear to have embraced it, since several of the Cynic letters call for following the shorter road (Ps.-Crates *Ep.* 6, 13, 21; Ps.-Diog. *Ep.* 30, 37.4). Indeed, these same letters insist that the short road is steep and rugged, even more difficult to travel than the longer road.

The third way in which Cynics distill Socratic virtue in their own particular way is by strengthening the Socratic opposition to ordinary values. Obviously, the Cynic's pursuit

of austere virtue and freedom requires a rejection of wealth and fame and conventional political power. But the Cynic understands this by the Sophists' distinction between nature and convention. The ordinary values Cynics reject are supposed to be merely conventional, and the simple, difficult life they embrace is supposed to be natural (Diog. Laert. 6.38, 71; Ps.-Diog. *Ep.* 6, 10, 25). But when this way of distinguishing between the ordinary life to be rejected and the virtuous, successful life to be cultivated joins some awareness of cultural variation, it encourages some sweeping rejections of local cultural practices. Some Cynics, possibly starting with Diogenes, adopted "adulterating the currency [*nomisma*]" as a slogan to capture their widespread opposition to conventional values and practices (*nomima*) (for example, Julian *Or.* 6.188a), and according to many of our sources, but not all—Epictetus and Julian are the most conspicuous exceptions—the Cynics take this to shameless extremes.

Consider food and sex, which can under some circumstances prompt considerable shame in most people. It is conventionally shameful to eat in certain places, including, for the Greeks, the agora, but Diogenes ate in the agora (Diog. Laert. 6.58, 61). It is conventionally shameful to eat certain foods, such as human flesh, but Diogenes found sanction for doing this in cultural variation (Diog. Laert. 6.73). Similarly, it is conventionally shameful to masturbate publicly, but Diogenes reportedly did so (Diog. Laert. 6.46, 69; Ps.-Diog. *Ep.* 35.2–3; Dio Chr. 6.17–20) and even justified himself by saying, "Would that I could also relieve my hunger by rubbing my belly" (Diog. Laert. 6.46).

This "antinomianism" is arguably the most distinctive wrinkle in Cynicism, as it entirely transforms their conception of virtue. After all, virtue, and especially social virtue, is ordinarily associated with a range of behaviors that are articulated in culturally specific terms and that favor contingent connections. The Cynics reject these behaviors as merely conventionally valuable, and so reject a range of duties conventionally associated with virtue. Diogenes, for instance, rejects the citizen's duties to his city by embracing his life as a man without a city (Diog. Laert. 6.38) and by characterizing himself as a "citizen of the world" (Diog. Laert. 6.63). The Cynics also generally oppose the common duty to marry and produce children (Diog. Laert. 6.29, 54; Epictetus *Dis.* 3.22.69–76; Ps.-Diog. *Ep.* 47; Max. Tyr. 36.5; with Schofield 1991: 119–127). (Diogenes apparently endorsed communal marriage and families in his *Republic* (Diog. Laert. 6.72), but this is presumably limited to the ideal city of the wise, perhaps because there would be no need for Cynicizing rejection of marriage there (Epictetus *Dis.* 3.22.67–68).) Cynics even reject expressions of gratitude toward parents (Ps-Diog. *Ep.* 21). Indeed, Crates says that from philosophy he got "a day's supply of lupins and to care for no one" (Diog. Laert. 6.86).

Nor should one suppose that the Cynic's apostasy from common sense is limited to the "positive duties" of helping others. The Cynic is ready to rethink the wrongness of theft, including theft from temples (Diog. Laert. 6.73), and ready to spit in another's face (Diog. Laert. 6.32), urinate on others (Diog. Laert. 6.46), or strike someone just to make a point (Ps.-Diog. *Ep.* 38.2). In each of these cases, the Cynic suggests that it is more important to express himself freely and to challenge the value of conventional norms than to abide by those norms.

The antinomianism of Cynic virtue seems to reinforce freedom and independence, by freeing the Cynic from relations of interdependence with others and from the community's strictures. So Crates compared his wallet to a city: everything a political community would provide he carries around with him, all by himself (Diog. Laert. 6.85). And so Lucian has Diogenes insist that one should not welcome either friend or stranger (*Vit. auct.* 9.22).

Accordingly, it might seem that the Cynic enjoys a solitary existence (Desmond 2008: 177), but other evidence suggests that the Cynics do not entirely reject connections with other human beings. First, they advise others to consider the influence of their associates (Ps.-Diog. *Ep.* 29) and to learn from the wise (Ps-Crates *Ep.* 31; Ps.-Diog. *Ep.* 6). This shows the importance of others to one's development as a Cynic, but it also shows that those who have already developed as Cynics still attend to others, by advising them. Epictetus' Cynics are especially committed teachers (esp. *Dis.* 3.22.17–18, with 3.22.24–25; cf. Dio Chr. 9.2, 101), and of course the Cynicism that produced or at least inspired the *Epistles* includes strong commitments to help others. But the anecdotes concerning Diogenes are also perfectly consistent with this, for Diogenes's scornful wit and theatrical behavior might be seen as an attempt to redirect others' attention from ordinary values to some careful thought about what excellence and success require (cf. Diog. Laert. 6.35).

Second, successfully teaching another makes him or her into a Cynic, which makes possible the friendship of two like-minded people (cf. Epictetus *Dis.* 3.22.63). Friendship is a thicker social relation that Diogenes seems to have embraced (Diog. Laert. 6.29, 68). Indeed, a syllogism about friends is attributed to him:

> All things belong to the gods. The wise are friends of the gods, and friends hold things in common. Therefore all things belong to the wise.
> (Diog. Laert. 6.37, 72; Ps.-Crates *Ep.* 26, 27; Ps-Diog. *Ep.* 10)

One Cynic *Epistle* (Ps-Diog., *Ep.* 10) appeals to this syllogism to justify begging, and others say that one should not beg from just anyone (Ps.-Crates *Ep.* 22, 36; Ps.-Diog. *Ep.* 38.3) but only from fellow Cynics and friends (Ps.-Crates *Ep.* 2; cf. Diog. Laert. 6.46). It is not clear how seriously one can take this evidence: surely begging from fellow beggars is bad strategy. But perhaps Cynics do recognize a special relationship with each other, and see some special connection to those from whom they can ask for support.

The Cynic concern to teach others and, perhaps, to form special friendships might be connected to Diogenes's famous "cosmopolitanism." Perhaps Diogenes sees himself as a citizen of the world not merely in the negative sense that he is not a citizen bound to any particular city but also in the positive sense that he is connected to all human beings (Epictetus *Dis.* 3.24.64) and recognizes the proper community as something universal (Diog. Laert. 6.72) (Moles 1995, 1996, 2000). But it is also possible that Epictetus and Diogenes Laertius 6.72 Stoicize Diogenes, so that his cosmopolitanism is merely negative (Goulet-Cazé 1982; Schofield 1991: 141–145). What is clear from the Cynics' concern to teach and to form friendships, however, is that the antinomianism of Cynic virtue and the Cynic pursuit of freedom and independence have their limits.

Thinking Cynicism through

The Cynic's way of life manifests a set of commitments that fit together and so embodies one sense of philosophy. But Diogenes and the Cynics reject the longer road of intellectual training, and this raises questions about how far Diogenes and the Cynics attempted to produce a systematic rationale for their philosophy. Why did the Cynics adopt their particular understanding of training, virtue, and success rather than other

Socratic possibilities? How did they support their conception of virtue and success? And how far did they think through their commitments in the other direction, from general commitments to particular proposals and actions? Did they have an account of nature and convention to help guide them?

The Cynics seem not to have supported their ethics by appealing to logic. Epictetus argues that the Stoics rightly put logic first (*Dis.* 1.17): even if it bears no fruit, it has the power to discriminate and examine other things (1.17.10). He cites not only the Stoics Zeno, Cleanthes, and Chrysippus but also Socrates and Antisthenes (1.17.11–12), but not Diogenes. To judge from the anecdotes, dialectic is not Diogenes's favored mode of examining others, and he showed little patience for logical puzzles such as the paradoxical reasoning that might suggest that motion is impossible. Diogenes refuted such arguments as Johnson refuted Berkeley, with simple behavior that defied the arguments (Diog. Laert. 6.38–39). Even the syllogisms that do appear in Diogenes Laërtius's account of Diogenes sound as though they might have been originally put to mocking use (Diog. Laert. 6.72). The evidence wholly supports Diogenes Laërtius's conclusion that the Cynics, like Ariston of Chios, ignore logic entirely (Diog. Laert. 6.103).

This is not to say that Cynics pay no attention to engaging other possible views and supporting their own. Their special antipathy to pleasure and luxury might be seen as an attack on other Socratics, especially the Cyrenaics, and their insistence that luxurious pleasures leave us less free and more vulnerable to fortune might suggest arguments to the effect that the hedonist's values are unstable. Pseudo-Lucian's *Cynic* even develops a few such arguments. So it is possible that Diogenes saw his way of life as the most consistent embodiment of a basic Socratic approach, just as Socrates, especially in Plato's *Gorgias*, justifies his way of life in terms of the most consistent answers to life's most important questions.

Still, whereas Socrates offers step-by-step arguments to lay bare the contradictions in his opponents' views, Diogenes scorns, jokes, and gestures. Perhaps his opposition to discursive argument and his embrace of alternative means of persuasion are grounded in a deeper suspicion of our words and arguments. Aristotle associates Antisthenes with the thoughts that "it is impossible to contradict" and "it is impossible to define the essence" (*Metaph.* Δ. 29, 1024b32–34 and H.3, 1043b23–28). Antisthenes appears to have reasoned that although there is a name for each concept and a reference for each name, it is not possible to identify a concept except by its name—which rules out definition—and it is not possible to invoke a name without successfully referring—which rules out contradiction. Perhaps Diogenes inherited his opposition to dialectic and logic from Antisthenes, directly or indirectly (Prince 2006).

The Cynics spurn physics just as surely as they do logic (Diog. Laert. 6.103), this time in agreement with Socrates (Xen. *Mem.* 1.1.11–15). So they do not have a systematic account of the natural world to which to turn to make sense of their distinction between what is natural and what merely conventional. But they are not entirely without resources. Occasionally, there is the suggestion that living naturally requires living more like an animal (Dio Chr. *Or.*6), but this would seem unhelpful, since there are many different kinds of animals living in many different kinds of ways and humans are animals too. Pseudo-Lucian's *Cynic* makes a better suggestion. Its Cynic argues that his uniform must be in accordance with nature because if it were not, then his body would be in bad condition and thus unable to perform its functions, such as walking (4). This associates the natural with some functions, and identifies behaviors as in accordance

with nature by supporting, or at least not undermining, these natural functions. So understood, the Cynic engages in a simple investigation of how the human body works and how other behaviors and things interact with what the body does (cf. Ps-Diog. *Ep.* 42). So, for instance, Diogenes tests whether it is natural to eat meat by seeing how his body reacts to eating minimally prepared meat (Julian *Or.* 6.191c–d).

This will not seem to get the Cynic very far in assessing the nature of, say, human social life, and we have seen that there are special difficulties in determining how far entangled in social relationships the Cynics want to be. But Diogenes might offer the whole of his existence as an experiment of sorts. Perhaps would-be Cynics are supposed to consider how strongly and independently Diogenes functions, to consider how weakly and dependently other human beings function, and to choose accordingly. Even if Diogenes *does* embrace some social relationships, he surely embraces them on terms that are supposed to enhance and not undermine his strong, clear functioning.

If this is how the Cynics thought through their Cynicism—with some attention to consistent commitments and some to robust physiological functioning—then we can understand why there was an ancient controversy about whether Cynicism is really a philosophy (Diog. Laert. 6.103). A philosopher is a lover of wisdom. There is a sense of wisdom that is manifest in one who lives well and not by luck. The philosophy embodied in a carefully chosen way of life is the pursuit of this wisdom. But there is another sense of wisdom that requires apprehending truths and attaining knowledge. The Cynic way of life shows little enthusiasm for pursuing wisdom of this second sort.

The extended appeal of Cynicism

Finally, if Cynicism is nothing but a way of life embodying austere virtue in pursuit of freedom and independence, with the confidence to flout conventional norms so as to be true to one's nature, it was around before Diogenes of Sinope. This is what makes it easy to identify Socrates and Antisthenes as precursors of Cynicism. What Diogenes did was to concentrate some existing ideals (of hardiness and freedom), to set them in high relief against other, competing ideals (luxury and social respect), and to give his way of life particularly memorable voice.

Of course, Cynicism as a way of life has also persisted in people who do not identify themselves as Cynics. Almost immediately, there were those who adopted the Cynic way of life, but replaced the short, rough road of Cynicism with the longer, intellectual road of training in logic and physics. These Stoics secured the lasting influence of Cynicism.

Socrates, Antisthenes, and Stoicism do not, however, fully capture Cynicism's double appeal. First, the Cynics offer an ideal of a rough, ascetic hero. They transform Socratic virtue from an intellectual ideal to something that suits Heracles (Ps.-Diog. *Ep.* 26; Epictetus *Dis.* 3.22.57). According to Julian, some people even said that Heracles invented the Cynic way of life (*Or.* 6.187c), and Dio Cocceianus complains that people ignore Diogenes as they ignore Heracles (8.26–27). Wherever there are lives of hard poverty or warriors, this ideal will find traction.

The Cynics also offer wit and theatricality. It seems unsurprising that the Cynic tradition spawned literary innovation and especially combined moral teaching with humorous scorn. There is some of this in Old Comedy, and some of it in Plato's Socrates. But Diogenes combines moral criticism with ingenious wit in unprecedented ways, and a long tradition of critics, including the small-C cynics of today, plays in his wake.

References and further reading

The ancient evidence for the Cynics is collected in Giannantoni 1990: 2:135–589.
For a fuller introduction, see Dudley 1937 or Desmond 2008.
Scholarly essays can be found in Billerbeck 1991 and in Branham and Goulet-Cazé 1996.

Bierce, A. [1906] (2000) *The Unabridged Devil's Dictionary*, David E. Schultz and S. T. Joshi (eds.) Athens, GA: University of Georgia Press.
Billerbeck, M. (1991) *Die Kyniker in der modernen Forschung: Aufsätze mit Einführung und Bibliographie*, Amsterdam: B.R. Grüner.
Branham, R. B. and Goulet-Cazé, M.-O. (eds.) (1996) *The Cynics*, Berkeley and Los Angeles, CA: University of California Press.
Desmond, W. (2008) *Cynics*, Berkeley and Los Angeles, CA: University of California Press.
Döring, K. (1995) "Diogenes und Antisthenes," *La Tradizione Socratica* (*Memorie dell' Instituto Italiano per gli Studi Filosofici* 25: 125–150.
Dorion, L.-A. (2003) "Akrasia et enkrateia dans les *Mémorables de Xénophon*," *Dialogue* 42: 645–672.
Dudley, D. R. (1937) *A History of Cynicism*, London: Methuen & Co.
Fritz, K. von. (1926) *Quellenuntersuchungen zu Leben und Philosophie des Diogenes von Sinope*. *Philologus* s.v. 18, 2.
Giannantoni, G. (1990) *Socratis et Socraticorum Reliquiae*, 4 vols. Naples: Bibliopolis.
Goulet-Cazé, M.-O. (1982) "Un syllogisme stoïcien sur la loi dans la doxographie de Diogène le Cynique," *Rheinische Museum* 125: 214–240.
——. (1996) "Appendix B: Who Was the First Dog?," in R. B. Branham and M.-O. Goulet-Cazé (eds.) *The Cynics*, Berkeley and Los Angeles, CA: University of California Press: 414–415.
McKirahan, V. T. (1994) "The Socratic Origins of the Cynics and Cyrenaics," in P. A. Vander Waerdt (ed.) *The Socratic Movement*, Ithaca, NY: Cornell University Press: 367–391.
Mansfeld, J. (1986) "Diogenes Laertius on Stoic Philosophy," *Elenchos* 7: 295–382.
Moles, J. L. (1995) "The Cynics and Politics," in A. Laks and M. Schofield (eds.) *Justice and Generosity: Studies in Hellenistic Social and Political Philosophy*, Cambridge: Cambridge University Press: 129–158.
——. (1996) "Cynic Cosmopolitanism," in R. B. Branham and M.-O. Goulet-Cazé (eds.) *The Cynics*, Berkeley and Los Angeles, CA: University of California Press: 105–120.
——. (2000) "The Cynics," in C. Rowe and M. Schofield (eds.) *The Cambridge History of Greek and Roman Political Thought*, Cambridge: Cambridge University Press: 415–434.
Prince, S. (2006) "Socrates, Antisthenes, and the Cynics," in S. Ahbel-Rappe and R. Kamtekar (eds.) *A Companion to Socrates*, Oxford: Blackwell: 75–92.
Schofield, M. (1991) *The Stoic Idea of the City*, Cambridge: Cambridge University Press.

Related chapters

8. Socrates: sources and interpretations
13. Plato on virtue and the good life
29. The Cyrenaics
30. The Stoic system: ethics and nature

29
THE CYRENAICS

James Warren

The school

The history of the Cyrenaic philosophical school can be divided into three major phases: (i) an initial articulation of a conception of the good life by Aristippus the Elder, a contemporary of Plato and associate of Socrates; (ii) a development of that view and further elaboration of a combined ethical and epistemological outlook by Aristippus the Younger, the grandson of Aristippus the Elder; (iii) a set of differing interpretations of this outlook by various followers of Aristippus who were also roughly contemporaries of the other great hedonist of the Hellenistic era: Epicurus. This third phase sees sometimes serious disagreement between various Cyrenaics—we know of three prominent members of the school: Theodorus, Hegesias, Anniceris—over particular aspects of the Aristippan view. For example, Hegesias and Anniceris appear to have disagreed over the possibility of anyone being able to attain and preserve a good life (*eudaimonia*). Hegesias was the more pessimistic of the two, while Anniceris may have taken up the cause of the Cyrenaic good life more vociferously against its Epicurean rival. Theodorus was known principally for his unorthodox theological views for which he earned the title of "the atheist" (Diog. Laert. 2.97). (For more discussion of these later Cyrenaics, see Annas 1993: 232–5; Long 1999: 635–9; Laks 1993 and 2007.) There is little evidence of the school surviving after this generation, whose disagreements and reinterpretations of the original Cyrenaic position may simply have caused the distinctive nature of the Aristippan view to be lost. The Cyrenaics continued to be of interest to later writers, however, both for the contrast they offered with the more successful Epicurean brand of hedonism and for various details of their own philosophical view.

Aristippus the Elder is best known as the main addressee in Xenophon's *Memorabilia* 2.1 of Socrates' re-telling of Prodicus' account of the choice of Heracles. The hero is offered two paths in life, personified by two women: one calls herself Happiness (*Eudaimonia*) but is said by her rival to be in reality Vice (*Kakia*); the second is Virtue (*Aretē*). They each offer a defence of their preferred life, and it is evident that the overall message is a protreptic towards virtue, self-restraint, and toil (*ponos*) although it is also claimed that such a life will produce its own pleasures, if not in fact more pleasures than its rival. It is tempting to infer that Socrates is concerned that Aristippus is overly dedicated to a life of pleasure and, certainly, our later biographies of Aristippus sometimes characterize him in such terms (see Diog. Laert. 2.65–85). However, other reports make him not a hedonist at all and it is likely than many such stories have been projected on to the elder Aristippus on the basis of the later and overtly hedonistic Cyrenaic philosophy.

Indeed, one ancient source notes explicitly that there is some confusion over whether to attribute the full articulation of the Cyrenaic philosophy to Aristippus the Elder or to his grandson, who was also named Aristippus but nicknamed "Mother-taught" in recognition of the influence of his mother and Aristippus the Elder's daughter, Arētē, on his intellectual development (Eusebius *Praeparatio evangelica* 14.18.32). There, it is stated clearly that it is the younger Aristippus who was the originator of the distinctive and fully articulated form of Cyrenaic philosophy that is the focus of our attention here, even though he may have taken his cue from some elements of his grandfather's views. (For further discussion see Tsouna-McKirahan 1994; Long 1999: 632–4. Zilioli 2012: 17–46 is more confident about Aristippus the Elder's foundational role.)

The pathē

The two major areas of the school's philosophical interest—epistemology and ethics—both make extensive use of the notion of "affections" (*pathē*, sing. *pathos*). The term is very general, meaning simply things that a person may undergo or experience. More specifically, the Cyrenaics use the term to refer to various motions in the soul that an agent experiences as a result of his interaction with the external world. These motions include the results of the workings of our perceptual capacities such as, for example, the *pathos* experienced as a result of tasting honey. Pleasure and pain are also *pathē*, although it is not clear whether these are distinct and independent *pathē* (in the sense that when I enjoy eating an ice-cream I experience both the *pathos* of the cool taste in my mouth and a second *pathos* of pleasure) or are, rather, further possible qualifications of the various perceptual *pathē* themselves (so I enjoy the pleasant *pathos* of the cool taste in my mouth). (Evidence from Eusebius *Praep. evang.* 14.18.31–2 may suggest that there are also intermediate *pathē* that are neither pleasant nor painful. Whether we should think of all perceptual *pathē* as such intermediates, but that they may or may not be accompanied by *pathē* of pleasure or pain, or whether perceptual *pathē* may be classed as either pleasant, painful, or neither is again not entirely clear (see Tsouna 1998: 10–14; Brunschwig 2001: 464–71).) Whatever the precise specification of their relationship with other *pathē*, the *pathē* of pleasure and pain form the basis for the Cyrenaics' ethical views since we are advised to pursue pleasure and avoid pain; the *pathē* of pleasure and pain are the sole sources of value.

Pathē are also the primary focus of Cyrenaic epistemology. Our own *pathē* are the only things to which we can have incorrigible access. It is impossible to infer reliably from a *pathos* of sweetness that a given object is sweet (we could be perceiving it as such because of a certain physiological condition and different people have conflicting *pathē* in response to some objects). So we should not say "this object is sweet," if we want to be sure of saying only what can be relied on as true, but rather "I am *sweetened*"—a curious sort of locution but one which is immune from doubt. The *pathē* are "private" in the sense that they are generated by a particular interaction between object and perceiver; they cannot by definition be shared. All our responses to the world are similarly qualified and similarly private. (For a brief introduction to Cyrenaic *pathē* see also Brunschwig 1999: 252–6.)

Epistemology

The Cyrenaics are often categorized as skeptics since they insisted that it is impossible to have a sure and veridical grasp (the reports often use the originally Stoic term *katalēpsis*)

of anything besides our own *pathē*. We find perhaps the clearest argument for Cyrenaic skepticism in Sextus Empiricus *Math.* 7.191–3: sometimes something that is not F can give the impression of being F. It is therefore not possible to infer from an impression of something's being F that it is indeed F. The argument in full is as follows with divisions in the argument marked out simply for ease of reference in the discussion:

> (A) The Cyrenaics, then, say that the *pathē* are the criteria of truth and that only these are apprehended (*katalambanesthai*) and met with without deceit, while none of the things which have caused the *pathē* is apprehended or without deceit. (B) For, they say, it is possible to say that we are "whitened" and "sweetened" without deceit (that is, truthfully) and reliably (that is, irrefutably). (C) But that what is the cause of the *pathos* is white or sweet is impossible to declare. (D) For it is reasonable that someone is disposed "whitely" by something not white and "sweetened" by something not sweet. (E1) For just as a dizzy person and someone with jaundice are affected by everything in a yellow fashion, someone suffering from ophthalmia is "reddened," someone who presses on his eye is affected by doubling, and someone in a mania sees two Thebes and imagines that the sun is double (E2) so in all these cases the fact that they all undergo some *pathos*—for example, they are being "yellowed" or "reddened" or "doubled"—is true, but that what is affecting them is yellow or red or double is considered false, so it is also overwhelmingly reasonable that we are able to grasp nothing more that our own *pathē*.

At the starting-point of the argument, the Cyrenaics refer to a number of familiar and—they like to think—plausible examples of mistaken perceptions; these are given at E1. For example, someone with a particular eye problem views everything as somehow "reddened." Alternatively, someone with jaundice sees everything tinged with a yellow color. Of course it is reasonable to think that such a person is mistaken and that therefore there are occasions on which a person may see something as red which is not in fact red. This is the general moral extracted from such cases and expressed the negative conclusion in C and D which contrasts with the certainty about the *pathos* itself which is expressed as the positive conclusion of A and B.

The Cyrenaics refrain from asserting explicitly that the imagined case is one in which something not yellow, for example, is perceived as yellow; rather, they assert that something "generally considered to be" not yellow is perceived as yellow. At no point do they make any determinate assertion about the nature of the external object. They ought not, of course, since otherwise their conclusion would be in tension with one of their premises and they need not make any such assertion to generate their skeptical worries. The various examples, we should also note, do not suffice to show that such mistakes are widespread, nor that they are very common at all. For one thing, the examples are all evidently of people who are in rather unusual states of sickness or who are engaged in the deliberate deformation of their perceptual organs. Given that we do not generally walk around pressing our eyeballs it would not be a persuasive case to argue that since, were we to do so, things which are not double would appear so, it is probable or likely that whenever we experience sweetness, say, it is being caused by something not sweet. Further, if we were convinced, for example, that each experience of sweetness is likely to come from something not sweet then such experiences would be a reasonably reliable guide at least to what is not sweet. Likelihood and probability are therefore not only

unwarranted but also undesired qualifications to this general statement. Rather, the examples in E1 are sufficient only to make it reasonable to think that this kind of error can and does occasionally happen; that will be enough for the Cyrenaics to urge their eventual conclusion. (A very similar argument can be found attributed to the Cyrenaics in Plutarch's *Against Colotes* 1120E–F and in the anonymous commentary on Plato's *Theaetetus*, 65.18–39 Bastianini and Sedley, an earlier text of which can be found as *SSR* IV A 214. The contrast in Sextus is between these *pathē* and what generate them, while in Anon. *in Plat. Theat.* it is between the *pathē* and "things outside" (*ta exōthen*), but cf. Sext. Emp. *Math.* 7.194 and 195).

The next step in the argument is indeed validly inferred from this appropriately weaker understanding of D: since it is reasonable to think that someone may experience sweetness as a result of something generally thought of as not sweet it is impossible to infer from a given experience of sweetness that the particular object being perceived is indeed sweet. The possibility of error, in other words, makes it impossible to deduce conclusively the nature of the object of perception. Further explanation of this stance can be found in C, since there we have the other half of the comparison and a fuller explanation of what the Cyrenaics take to be the necessary conditions for being able to declare something confidently. Even in the case of someone who experiences sweetness when encountering an object which is not sweet, the experience of sweetness has certain characteristics: the apprehension of a *pathos* is somehow (i) veridical or accurate and also (ii) reliable or irrefutable. This helps to explain further what was revealed to be deficient about our grasp on external objects since what matters about our grasp of the *pathē* is precisely the combination of these two kinds of characteristic. First, there are cases in which it is somehow evident that one's conception of an external object is false since the cases in E1 have allowed us to conclude reasonably that on occasion an experience of sweetness can come from an object which is not sweet. This method of cognition therefore sometimes fails to display characteristic (i). Second, because of the possibility of error which this occasional failure reveals, this form of cognition in general also fails to display characteristic (ii). In other words, since it is reasonable to think that such perceptions are sometimes misleading, it would be unreasonable to think that any given such perception is absolutely reliable.

The general form argument as a whole is the following:

1. Sense impressions sometimes (or to some people) present some X as F and at other times (or to other people) as not F.
2. The same thing cannot be both F and not F.
3. There is no way of preferring one impression over a conflicting impression.
4. We have insufficient evidence to say for sure that X is either F or not F.

The Cyrenaics react to the conclusion in 4 above, not by offering a relativistic account of X's being F (as does the Protagorean view in Plato's *Theaetetus*) nor simply by suspending judgment on the matter (as Sextus prefers), but rather by finding something which is not subject to the problems outlined here, namely the impression or *pathos* itself. Given that the particular *pathos* some one individual undergoes does not exhibit the conflicts outlined in the various familiar examples, then provided we restrict what we say to claims about the *pathos* then there is no difficulty in affirming something for sure. Even if I cannot say for sure that this honey is sweet, for instance, I can say for sure that I am undergoing a *pathos* of such-and-such a sort.

In his work *Against Colotes* (*Adv. Col.*), Plutarch criticizes Colotes the Epicurean's attack on the Cyrenaics, and in the process offers some very useful information about their view. At 1120C he comments that the Cyrenaics thought the "evidence derived from the appearances was insufficient warrant for certainty about things (*pragmata*) and withdrew as in a siege from the world about them and shut themselves up in their *pathē*." It is worth pursuing the connotations of the image. Part of it is what we might expect given the general argument we have already seen. Since each individual does not have at his disposal sufficient grounds to affirm anything confidently about how the external *pragmata* are, he gives up this disputed territory and retreats within his personal/city boundaries, relying now only on what he can be sure of and what is beyond dispute. On the other hand, a siege is usually something which is a collective experience; cities are besieged and cities contain a number of people. (For an extended discussion of the passage see Kechagia 2011: 261–8.)

Plutarch offers this as an analogy for their flight from the external things to the *pathē*. This is a forced retreat and however much the Cyrenaics might desire to sally forth and take back the territory around the city, they are somehow prevented from doing so. The reason for their involuntary enclosure must be just the fact that they have insufficient evidential warrant to claim any territory beyond their own internal states. In his attack on the Cyrenaics, the Peripatetic Aristocles of Messene offers a slightly different analogy which again points to the idea that the Cyrenaic should be conceived as someone who is too weak to do anything more that avow the facts of his internal states. For Aristocles, the Cyrenaics are not heroically besieged citizens who are unwillingly held inside, but instead are oppressed by a kind of torpor (*Praep. evang.* 14.19.1). Either way, the Cyrenaics' "turn inwards" is clearly cast as a move made *faute de mieux* and required by various independently accepted standards for sufficiency in defending certain claims about items in the external world (cf. Tsouna 1998: 3; Brunschwig 2001: 462–3).

Later in Plutarch's discussion, the Cyrenaics are cast as avoiding conflict not only in the sense of avoiding saying something indefensible about external *pragmata* but also in the sense of avoiding conflict with other perceivers and their claims about how things are (1120F):

> But when [opinion] strays beyond and meddles with judgements and pronouncements about external matters, it is forever getting embroiled with itself and falling into conflict with others in whom the same matters give rise to contrary experiences and dissimilar impressions.
>
> (trans. Einarson and De Lacy)

Plutarch considers what would happen if opinion were to break out, as if from a siege, (*ekbainousa*) and involve itself in matters that do not belong solely to the perceiver in question (*polupragmosunē*). Such a busy-body kind of opinion, set on making judgments about external matters will fall prey to two problems. First, it will cause itself some degree of concern or anxiety (*tarassei*). The last point is presumably made because of its particular resonance with the Epicureans' preferred ideal state of the absence of mental pain (*ataraxia*) since Plutarch will later argue that the Colotes and his Epicurean colleagues are themselves no better placed than the Cyrenaics and if a Cyrenaic cannot maintain *ataraxia* without retreating into the absurdly restricted position which Colotes criticizes, then the Epicurean will face just the same difficulty.

The anxiety must be a measure of the fact that in offering such judgments, opinion is venturing out on to ground which is far less secure that it is used to when dealing merely with internal *pathē*. The judgments are far less assured since opinion does not have sufficient confirmation (*katabebaiōsis*) of its claims. As Epicurus' own *Rata Sententia* 24 insists, this hasty kind of assertion generates doubt and leaves the judger open to all kinds of error.

Second, if opinion ventures on to ground that does not belong solely to the perceiver in question, it will fall into conflict with other perceivers. It is agreed by the Cyrenaics that some given external object may well cause in different perceivers different impressions. There is no conflict between the perceivers' claims if they are restricted simply to reports about how each is being affected internally. But once anyone tries to stake a claim on the intervening ground, so to speak, the territory external to both, then conflict is likely. This suggests the possibility that the siege in 1120C is not, so to speak, a battle waged between a Cyrenaic and the external *pragmata*. Rather, the picture is of Cyrenaics who are so epistemologically conflict-averse that each remains shut inside his own *pathē* in order to avoid even the potential for conflict raised by making claims about external *pragmata*.

According to Colotes, as a result of the aversion to the possibility of epistemological conflict, the Cyrenaics fall into the same general set of problems that beset all the philosophers detailed in his work. Indeed, the title of the work: *That it is impossible to live following the doctrines of other philosophers* (1107E) shows the strategy rather clearly. In the case of the Cyrenaics, the claim is that by retreating solely into their *pathē* they render themselves unable to navigate around the world: a Cyrenaics says only, for example, that he "is walled" when he experiences a certain kind of *pathos*. In merely avowing his own affection he does not commit himself to any claim about the wall. Colotes cannot see how, in that case, the Cyrenaic is able to prevent himself from bumping into things (since he has no opinion about the wall, including where it is …). And since the Cyrenaic is evidently able to maneuver about the world relatively effectively, converse with other Cyrenaics, find and eat his dinner and so on, the suspicion lingers that he is indeed committed to various beliefs about things other than his own *pathē*.

The accusation raises an important question about the scope of Cyrenaic skepticism. In restricting their claims to their own *pathē* were the Cyrenaics retreating, as it were, within themselves to such an extent that they were not prepared even to assert the *existence* of a world beyond their *pathē*? Or were they perfectly happy to accept that there is such a world and that there are the various external objects by which they are affected but nevertheless refuse to assert anything about the particular qualities or powers of those external objects? The former possibility is a radical form of skepticism that would be hard to parallel in other ancient writers. If it is the Cyrenaic view, it would make Colotes' *apraxia* charge very serious. A Cyrenaic might, on the latter and less radical view, feel that his commitment to there being an external world populated by various external objects including, for example, a wall in front of him at the moment, would allow him sufficient grounds for living a life even though he will not affirm for sure that the wall is, for example, rough or painted red.

There is no compelling evidence for the view that the Cyrenaics systematically doubted the existence of an external world or the existence of external objects. Indeed, we have already seen that the clearest argument in our sources in favor of the Cyrenaic epistemological view appears to be based on the premise that there are external objects

that affect us and that a given external object may affect different perceivers or the same perceiver in different circumstances in differing ways (cf. Everson 1991: 128–34).

Nevertheless, even if we set aside a global skepticism about the existence of an external world, there is still an important choice to be made. We might put the question as follows. Let us distinguish two kinds of skepticism that might still be ascribed to the Cyrenaics. When a Cyrenaic accidentally places his hand so that he is affected in a certain way and avows a *pathos* by saying "I am burned," he is led to do so because he understands that the way he is affected is insufficient warrant to assert something else in addition. What is the additional claim he declines to make? There are two possibilities: (a) "This fire burns;" (b) "This thing that burns me is fire." Call a refusal to assert claims of type (a) "skepticism about the nature of affecting objects," and call a refusal to make claims of type (b) "skepticism about the identity of affecting objects." The distinction is interesting because Colotes' report might lend support to ascribing both types of skepticism to the Cyrenaics.

Later in *Adv. Col.* (1120E.) the focus turns to the familiar examples of perceptual conflict such as the traditional worry about whether honey is or is not sweet. Other sources also give us paradigmatic examples of Cyrenaics locutions that would seem appropriate to this kind of concern, namely the kind of concern about making claims of type (a): a refusal to say whether honey is sweet rather than merely appears so or generates a *pathos* of being sweetened. For example, the very claim given above as an example of type (a) appears in the very brief précis of the Cyrenaic view in Anon. *in Plat. Theat.* at 65.32–9 Bastianini and Sedley.

Sextus, too, concentrates on Cyrenaic claims of the type: "We are sweetened" (*Math.* 7.191) and in general he casts his overall presentation of their position in terms of a doubt raised by apparent cases of the same item appearing to have different qualities to different perceivers or causing different effects on different subjects (7.196–8). However, it has been noted that Sextus is carefully non-committal is his descriptions of the objects in question: he does not say, for example, that a cloak might appear white to one person and not to another but only that "the external thing" or "what is productive of the *pathos*" does so. This leaves it open whether the item in question is, for example, a cloak as well as leaving undecidable whether or not it is (rather than merely appears) white. Indeed, it has been suggested that this is a careful lack of commitment of Sextus' part that perhaps reflects a similar caution on the part of the Cyrenaics themselves: a caution that might in turn give grounds for ascribing to them a skepticism about the identity of external objects (Tsouna 1998: 77; Brunschwig 1999: 256–9; Chiesara 2001: 138). All the same, Sextus is primarily interested in the Cyrenaics' refusal to make claims about what these external items are like, what we might call claims about their properties or qualities (being white, being sweet), and not about what these items are (a cloak, a wall, some honey). See for example Sext. Emp. *Math.* 7.197. If that is right, we might account for his non-committal terms for "external objects" simply as a result of his wanting to give a very general account of the Cyrenaics' line of reasoning: we are invited to fill in some specific object—a cloak, a wall—to the general description of "something external that causes a *pathos* of white." The lack of determinacy is an expositional convenience rather than a marked and significant philosophical stance.

The anonymous commentator's report explicitly rules out skepticism of type (b), while Sextus' report is compatible with it. This leaves Aristocles of Messene (*ap.* Eusebius *Praep. evang.*14.19, F5 Chiesara) as the only major source that puts the Cyrenaic view in terms that explicitly assert a skepticism about the identity of external objects:

> Next will be those who say that the affections (*pathē*) only are apprehensible; some of those from Cyrene affirm this. As if oppressed by a kind of torpor, they insisted that they knew nothing at all, unless someone standing by struck and pricked them; they said that, when burnt or cut, they knew that they were affected by something, but whether what burnt them was fire, or what cut them iron, they could not tell.
>
> (trans. Chiesara)

This subtle difference in the interpretation of what the Cyrenaics say they do not know—that they do not know that what burns is fire rather than that they do not know whether fire burns—is a deliberately chosen part of Aristocles' presentation of the Cyrenaic view, since he goes on in *Praep. evang.*14.19.4 to base his criticisms on precisely this ascription to the Cyrenaics of a skepticism about the identity of external objects. He points out the absurdity of a person not knowing what he is affected by. People know one another; they know roads, cities, food; craftsmen know their tools and so on. And they need such knowledge simply to be able to live a life. Generally, this way of casting the Cyrenaics' position makes them appear even more absurd than we might already suspect. Perhaps it also makes the Cyrenaics more like the absurdly skeptical Pyrrhonians of *Praep. evang.*14.18 who don't even know whether they are cut or burned (14.18.24) and whose general metaphysical outlook, says Aristocles, would prevent them from identifying, naming, and indeed saying, anything determinate.

Plutarch's account also contains some evidence that could be used in ascribing to the Cyrenaics skepticism of type (b). Colotes' examples of Cyrenaic avowals certainly suggest a much wider set of claims than those covered by type (a). Early in Colotes' presentation of the absurd things Cyrenaics are compelled to say, he gives the examples of: "I am wall-ed," "I am horse-d," and "I am man-ed" (1120D). The implied refusal to assert on the basis of a certain perceptual experience "This is a wall" would indeed point to a skepticism about the identity and not merely the qualitative nature of affecting objects. But this evidence ought not to be given much weight. Plutarch introduces this report with the qualification that Colotes is arguing "in jest," so we ought to be suspicious of this being a reasonable interpretation of Cyrenaic intentions, let alone an accurate report of what they did in fact recommend. And there is every reason for Colotes to try to emphasize as far as possible what he thinks is the absurdity of his opponents' views (cf. Tsouna 1998: 83; Kechagia 2011: 253–61).

We have good reason, therefore, to think that this unusual presentation of the Cyrenaics' view by both Aristocles and Colotes can be explained in terms of the polemical intent of the two authors. Aristocles wants to push the Cyrenaics towards the extreme and absurd view he also finds expressed by Pyrrho and which, building on Aristotle's discussions of various extreme views in *Metaphysics* Γ.4 and 5, he thinks cannot consistently be applied by someone living a human life (cf. Tsouna 1998: 62–72; Warren 2000). Similarly, Colotes' claims at 1120D can be set aside as unlikely to be an accurate representation of their intended view. Both Colotes and Aristocles have exaggerated the Cyrenaics' skepticism to produce what they think are more compelling examples of the absurdities of their opponents' ways of life.

Hedonism

For much of our information on Cyrenaic ethics we are reliant on Diogenes Laërtius (2.87–92). His account is succinct and somewhat jumbled, but it offers enough for us to

be able to see what was distinctive about their approach. That distinctive nature does not extend, however, to the reported arguments in favor of hedonism: our only evidence for that offers the common ideas that (i) people pursue pleasure as do all animals from childhood without any deliberation, (ii) pleasure is a complete and final goal of pursuit, and (iii) we particularly avoid its opposite, pain (Diog. Laert. 2.87, 89). These are sufficiently like the arguments Aristotle ascribes to Eudoxus in *Eth. Nic.* 10.2 that it is hard to think they are anything other than generic hedonist arguments.

The Cyrenaics define pleasure as a "smooth motion" (or change: *kinēsis*) in the soul and pain as a "rough motion" (Diog. Laert. 2.86–7). The conception of pleasure and pain as motions is common and prominent in a number of Platonic dialogues (for example, *Republic* 583e) but the Cyrenaics show no sign of endorsing the common accompanying claim that pleasure is associated always with a process of satisfying a desire or lack. The "smooth"/"rough" contrast may capture the obvious phenomenological difference between pleasure and pain. The decision to cast them both similarly as psychic motions may be a gesture towards the common idea that they are somehow opposite but analogous psychological phenomena. The contrast may also try to capture the sense in which pleasure has a positive value: the smooth motion is somehow according to nature while a rough motion is harsh and, as it were, against the grain. The Cyrenaics also recognize an intermediate state: Diog. Laert. 2.89; the absence of pleasure and absence of pain are not *kinēseis*: it is the condition of someone, as it were, asleep. Eusebius *Praep. evang.* 14.18.31–2 puts the contrast in terms of a comparison between (a) a gentle wave/favorable wind (pleasure), (b) a calm sea (the intermediate state), and (c) a rough sea (pain). This is perhaps a polemical move aimed at the Epicurean denial of an intermediate state and the recommendation of painlessness as the highest pleasure, which the Epicureans sometimes likened to the state of a calm sea (*galēnē*; they were following Democritus in this: see Diog. Laert. 9.45).

Two further claims are then offered about the value of pleasure. First, they assert that pleasure is valuable no matter what its source or object; there are no "shameful pleasures" of the sort that unsettle Callicles in Plato's *Gorgias* (*Grg.* 494c–e; some of the biographical evidence about Aristippus might reflect this view: Diog. Laert. 2.66–9, 74–83). The Cyrenaics also reject the insistence common to Plato and Aristotle that pleasures may vary in value according to what the pleasure is taken in or the activity from which it arises. Rather, the value of pleasure is entirely intrinsic to its phenomenal nature. This is nevertheless compatible with the idea that pleasures may vary in intensity and that perhaps longer pleasures are preferable to shorter pleasures but, perhaps in keeping with their general epistemological reticence to make sure claims about the nature of external objects, the Cyrenaics locate all value solely in the quality of the *pathos* itself.

The Cyrenaics held that "particular pleasure" (Diog. Laert. 2.87, 2.88) is choiceworthy and the *telos*. This seems to be an insistence on the final value of particular episodes or experiences of pleasure at the moment they are being enjoyed, since the Cyrenaics contrast the pursuit of these with the pursuit of happiness or a good life, *eudaimonia*, as a whole. They make the striking claim that *eudaimonia* is not choiceworthy in itself but only indirectly since it is best conceived as a collection of the various particular pleasures, each of which is enjoyed and therefore of value only in the present moment at which it is experienced. A whole life, in other words, has only a derivative value based on the sum or collection (for which our evidence uses various terms: Diog. Laert. 2.90: *athroismos*; 2.87: *systēma*) of all the episodes of pleasure—past, present, and future—which it contains. (The inclusion of non-present pleasures in a person's *eudaimonia*

does not mean that at any moment within the life the person concerned can embrace or enjoy these past and future pleasures but only that we can assess the total amount of pleasure in a life.)

If, as seems likely, a "particular pleasure" is a discrete episode or instance of the smooth motion in the soul, then such *pathē* are instinctively pursued and are *per se* good. A good life, in contrast, seems to be a simple addition of these episodic pleasures—the more such pleasure, the better the life. The value of the life as a whole is nothing more than the collection of the various valuable episodes of particular pleasures. We might presume, although it is not mentioned here, that episodes of pain are similarly *per se* bad in which case it is likely that a person's *eudaimonia* is best assessed as the simple sum of all the pleasures in the life minus the sum of all the pains. This is therefore a form of what we might call "additive hedonism." One consequence of this view is that there is no limit to happiness in following sense: however good a life was it might always have been better. There could always have been more particular pleasures in it since the life could always have been longer than it was. In that case, it is impossible ever to say that a person has attained a complete and satisfying good life, but the Cyrenaics evidently embraced that consequence in insisting on the merely derivative value of *eudaimonia* itself. Further, the Cyrenaics appear to give no value to the sense we might have of there being a "shape" of a life. Such a view might deny that the value of a life is simply the sum of its valuable constituents: two lives which contain an identical set of *pathē* might nevertheless be valued differently because the *pathē* in each are arranged differently over time. (See Feldman 2004: 124–41 for a defense of a hedonism that might accommodate such a view; notice also the formulation of what he calls "Aristippan hedonism" at 30–4.)

Their stance overall is best understood not as a straightforward consequence of hedonist axiology but rather as a consequence of the further insistence on the primary value of each *pathos* of pleasure only at the time of its occurrence. Considered in that light, the pursuit of pleasure cannot function as a complete or final goal that might orient a person's desires and pursuit throughout a life in the way that *eudaimonia* ought to be a complete and final goal. Faced with an incompatibility that prevents the identification of pleasure and *eudaimonia* the Cyrenaics retain pleasure as the primary object of pursuit and reconsider the notion of a good life as a result.

The evidence for a divorce in Cyrenaic ethics between the *telos*—pleasure—and *eudaimonia* has provoked some to claim that the Cyrenaics abandoned eudaimonism entirely, perhaps denying that there is any sense in the idea of aiming at a "good life" overall. Certainly, the Cyrenaics appear to deny that a complete life as a whole has a value over and above the value of the collection of pleasures it contains. Further, they agree that even a wise man cannot live entirely pleasantly but will be able to enjoy pleasure and avoid pain only "as much as is possible" (Diog. Laert. 2.91). Nevertheless, there is a sense in which a Cyrenaic pursues a good life in so far as he pursues more and more of the episodic particular pleasures; they do tell us to aim to construct as great as possible a sum of pleasures throughout a life. There is therefore a sense in which the Cyrenaics care about the value of a life as a whole, but they take its value to be derivative from particular ends: the primary goal is each particular pleasure as and when it comes; we should pursue eudaimonia via pursuing these pleasures. The question remains whether this view can really stand as a eudaimonism worth the name. There is some assessment of the goodness of a life as a whole, but it seems that it will always come down to a simple sum of various component experiences. (For further discussion of the

question, see Annas 1993: 230–36 and compare Irwin 1991. Tsouna 2002 argues for a eudaimonist interpretation; cf. O'Keefe 2002.)

It has also been claimed that the Cyrenaics' general metaphysical stance prevents them from offering a eudaimonist approach (see Irwin 1991). If they hold, for example, a radical view of personal persistence such that a person is merely a series of perceptual bundles or *pathē*, each of which is generated moment-to-moment by particular interactions between a sense organ and an external object then, since there is no underlying persistent unity to these there is no sense in which it is possible for a single persistent subject to consider its past and future. Such a view, perhaps inspired by thinking about the "secret doctrine" of Plato's *Theaetetus*, might indeed present a difficulty for any account of the good life. However, there is no reason to think they did hold such a view of personal persistence (see Tsouna 1998: 124–37). They are evidently prepared to talk about a person and his memories and expectations and the most plausible interpretation of their overall epistemological stance is that they were prepared to accept the existence of various external objects (for example, "this is a fire") and remained cautious only about asserting any stable or natural properties of such external objects independent of the *pathē* they might generate (for example, "this fire burns").

Some of the later Cyrenaics do seem to have rejected or abandoned the idea that we might be concerned with attaining *eudaimonia* and embraced a kind of pessimism. For example, Hegesias, one of the various Cyrenaics of the generation after Aristippus the younger, concluded that it is impossible to attain happiness (Diog. Laert. 2.93–5). He insisted that pain is inevitable and fortune often disappoints. In that case, it is impossible to be always experiencing the *pathos* of pleasure and it is impossible to plan ahead so as to make sure to maximise what pleasures are possible. Life will never be perfectly good, will often be painful and miserable, and there is little anyone can do to improve it. In that case, it is perhaps better not to continue living since to do so will often merely prolong unhappiness. Hegesias was thought so subversive that he acquired the nickname "Death-persuader" and, we are told, was banned by Ptolemy from lecturing publicly: Cicero *Tusculan Disputations* 1.83 (cf. Matson 1998).

At Diog. Laert. 2.91, we are told that the Cyrenaics recommended that we should enjoy each pleasure "as it comes." This seems to be aimed at the claim made by the Epicureans that pleasure can be experienced in the present as a result of anticipating some future pleasant event or recalling some previous pleasant event. (Diog. Laert. 2.89 makes an explicit contrast with the Epicureans.) The Cyrenaics counter by insisting that pleasure is "unitemporal" (*monochronos*: Athenaeus 12, 544A–B; cf. Aelian *Varia Historia* 14.6). The best interpretation of this claim recalls the foundational assertion that pleasure and pain are also *pathē* and therefore also constituted by a particular interaction between perceiver and a given object. A particular pleasure is therefore both private and tied to a specific such interaction: in the absence of either the perceiver in this particular state or the object in this particular state that particular pleasure cannot be experienced. *Pathē* are therefore all unrepeatable. For example, I cannot take pleasure in advance at the anticipation of receiving a big birthday present since my pleasure when I do get the present will be a *pathos* constituted by an interaction at that time between me and the various objects I perceive.

The obvious objection to this stance is that it is evidently possible to enjoy anticipating or recollecting non-present events. In response, we can clarify the Cyrenaic position. The *pathos* of pleasure being anticipated or recollected occurs only at the time of the pleasure itself; anticipating a pleasure is not an advance installment of some *pathos*

yet to come and, similarly, if I do enjoy some memory then the pleasure I get is not some residue or recovered pleasure I had at the time. (As reported at Diog. Laert. 2.89, the motion of the soul dissipates over time.) Rather, if anticipation or recollection is accompanied by pleasure then this is a new and unrelated *pathos* to be identified with some presently obtaining psychic motion.

The Cyrenaics' stance here is extremely interesting. Contrast the Epicureans' assumption that anticipation and recollection somehow deliver access to the pleasure a person will experience or has already experienced. The Cyrenaics reject this model: pleasure and pain must always be present *pathē* generated by something present. If I enjoy some anticipation, I am enjoying the present thought and not some advance installment of a future experience. This view should be distinguished, however, from the disagreement with the Epicureans over the efficacy of recalling past pleasures as a means to mitigate present pains. (For the Epicurean stance, see: Diog. Laert. 10.22; 10.137 and cf. 2.89.) The Cyrenaics can think that this is not likely to be effective even if a recollected pleasure is not a revived past *pathos* but is rather a brand new present *pathos*.However, the Cyrenaics do think that it is possible to ready oneself against likely future pains by a form of "pre-rehearsal" (*praemeditatio mali*; see Cicero *Tusculan Disputations* 3.28–35; cf. Graver 2002a, 2002b: 96–101 and 195–201). Cicero initially ascribes to the Cyrenaics the implausible claim that only unexpected pains are painful (*Tusc*. 3.28). More likely, and more in keeping with the remainder of his discussion, it appears that by thinking in advance of the supposed pain the Cyrenaic will lessen the pain of the event when it eventually occurs. It cannot be that the future *pathos* is being experienced in advance and its intensity eased by its thereby being spread more extensively through time since this would appear to violate the Cyrenaics' insistence that pain must be unitemporal: any pain experienced in advance must be a distinct *pathos* from the future and expected *pathos* of pain. And even if the effect of pre-rehearsal were that the single pain is spread out over time this would seem unlikely to amount to a diminution of pain overall. The best explanation is that by thinking in advance of possible harms the Cyrenaic's soul becomes arranged and prepared such that, should the imagined harm occur, it will generate a less intense *pathos* of pain. For example, if the Cyrenaic has been constantly thinking that his children are mortal and fragile it will apparently be less painful for him should one of them be injured or die. The Cyrenaic does not conjure up for himself the painful grief in advance. (Aelian *Varia Historia* 14.6 reports that Aristippus advised against both "toiling in retrospect over things past" and "toiling in advance over things to come.") Rather, the Cyrenaic constantly reminds himself that a certain painful event is possible, so ensuring that it will not be a shock should he ever experience it in the future. The pre-rehearsal is either not itself painful at all or, if it is painful to some extent, the combination of the pre-rehearsal and the eventual lessened pain is not so bad as an unexpected and intense pain.

This disagreement with the Epicureans is also to be related to the Cyrenaics' claim that the pleasure that is the *telos* is "bodily" pleasure (Diog. Laert. 2.87). The crucial information comes at Diog. Laert. 2.89–90. Many perceptual pleasures are not entirely without influence from one's intellectual grip on the situation: we might enjoy a singer's performance of a song of mourning but listen in pain to the very same song sung by someone genuinely grieving (for examples of differential enjoyment of identical visual experiences cf. Plut. *Quaest. conv*. 674A–B). However, there are pleasures that are entirely free from perceptual or other bodily stimuli. These might include the pleasures and pains of thinking about some future or past event or those

that are not derived from bodily pleasures. Diog. Laert. 2.90 also gives the example of the disinterested pleasure one might take in the prosperity of one's homeland. Nevertheless the Cyrenaics insist that these pleasures are too weak to counter present bodily distress in the way the Epicureans claimed that they could (cf. Diog. Laert. 10.22; Cic. *Tusc*. 3.33–46).

Note also that in the reports in both Athenaeus and Aelian specify that for Aristippus future pleasures are both "not yet and unclear" while past pleasures are only "no longer." This is evidently very carefully phrased: it is sure that past pleasures did happen but that they are nevertheless unavailable now; there is an additional concern about future pleasures: not only are they "not yet" but also it is not clear they will happen at all. There might in that case be reasons to doubt the effectiveness of prudential reasoning. Certainly, the Cyrenaics claim that not even every wise man can be sure of living pleasantly (Diog. Laert. 2.91) so we might assume that some pains are inevitable and that even the best planning cannot guarantee a constant experience of pleasure. On the other hand, the Cyrenaics do recognize a value to practical wisdom (*phronēsis*) albeit a merely instrumental one: *phronēsis* is not a good in itself, although it can be considered good in so far as its results—presumably more pleasures—are good. They do not therefore embrace a radical aprudentialism since they advocate the cultivation to some degree of friendship, virtue, and physical and intellectual training, even though these things are not good *per se*, evidently with some view in mind of the future good they might serve (Diog. Laert. 2.90–92). Their evaluation of virtue is again in clear contrast with Epicurean hedonism (see Sedley 2002). They nevertheless advocated such measure while reminding us that they cannot ever guarantee future pleasures: the future is to an important degree impossible to predict precisely and is to that extent beyond our control (for more discussion see Warren 2001; O'Keefe 2002).

References and further reading

The sources for Cyrenaic philosophy are collected in G. Giannantoni's *Socratis et Socraticorum reliquiae* (Naples, 2nd edition, 1990) IV A (s.v. Aristippus). The most important are Diogenes Laërtius' *Life of Aristippus* (Diog. Laert. 2.65–104), which contains most of our information on Cyrenaic ethics, and the sections devoted to the Cyrenaics in Aristocles (*ap*. Eusebius *Praep. evang*. 14.18.31–19.7), Cicero (*Acad*. 2.18–22), Sextus Empiricus (*Math*. 7.190–200), and Plutarch (*Adv. Col*. 1120C–1121C). These are available in English translation as an appendix to Tsouna 1998. Tsouna 1998 and Zilioli 2012 are the only recent monographs in English devoted to the school. Zilioli's overall interpretation is often very different from the one defended here.

Annas, J. (1993) *The Morality of Happiness*, Oxford: Oxford University Press.

Bastianini, G. and Sedley, D. (1995) Edition of Anonymous Commentary on Plato's *Theaetetus* in *Corpus dei papiri filosofici greci e latini, vol. III*, Florence: Olshki: 227–562.

Brunschwig, J. (1999) "The beginnings of Hellenistic epistemology," in K. Algra et al. (eds.) *The Cambridge History of Hellenistic philosophy*, Cambridge: Cambridge University Press: 229–59.

Brunschwig, J. (2001) "La théorie cyrénaïque de la connaissance et le problème de ses rapports avec Socrate," in G. Romeyer–Dherbey and J.–B. Gourinat (eds.) *Socrate et les Socratiques*, Paris: Vrin: 457–77.

Chiesara, M. L. (2001) *Aristocles of Messene: Testimonies and Fragments*, Oxford: Oxford University Press.

Einarson, B. and De Lacy, P. H. (1967) *Plutarch's Moralia Vol. XIV*, Cambridge, MA: Loeb Classical Library.

Everson, S. (1991) "The objective appearance of Pyrrhonism," in his (ed.) *Psychology: Companions to Ancient Thought 2*, Cambridge: Cambridge University Press: 121–47.

Feldman, F. (2004) *Pleasure and the Good Life: Concerning the Nature, Varieties, and Plausibility of Hedonism*, Oxford: Oxford University Press.

Giannantoni G. ed. (1990) *Socratis et socraticorum reliquiae* (2nd edition, 4 vols.), Naples: Bibliopolis.

Graver, M. (2002a) "Managing mental pain: Epicurus vs. Aristippus on the pre-rehearsal of future ills," *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 17: 155–77; with commentary by G. Striker: 178–84.
Graver, M. (2002b) *Cicero on the Emotions: Tusculan Disputations 3 and 4*, Chicago: University of Chicago Press.
Irwin, T. (1991) "Aristippus against happiness," *The Monist* 74: 55–82.
Kechagia, E. (2011) *Plutarch Against Colotes: A Lesson in History of Philosophy*, Oxford: Oxford University Press.
Laks, A. (1993) "Annicéris et les plaisirs psychiques: quelques préalables doxographiques," in J. Brunschwig and M. Nussbaum (eds.) *Passions and Perceptions*, Cambridge: Cambridge University Press: 18–49.
Laks, A. (2007) "Plaisirs cyrénaïques: pour une logique de l'évolution interne à l'école," in L. Boulègue and C. Lévy (eds.) *Hédonismes: penser et dire le plaisir dans l'Antiquité et à la Renaissance* Villeneuve d'Ascq: Septentrion: 17–46.
Long, A. A. (1999) "The Socratic legacy," in K. Algra et al. (eds.) *The Cambridge History of Hellenistic philosophy*, Cambridge: Cambridge University Press: 617–41.
Mannebach, E. (1961) *Aristippi et Cyrenaicorum fragmenta*, Leiden: Brill.
Matson, W. (1998) "Hegesias the death-persuader; or, the gloominess of hedonism," *Philosophy* 73: 553–557.
O'Keefe, T. (2002) "The Cyrenaics on pleasure, happiness, and future-concern," *Phronesis* 47: 395–416.
Sedley, D. (2002) "Diogenes of Oenoanda on Cyrenaic hedonism," *Proceedings of the Cambridge Philological Society* 48: 159–74.
Tsouna, V. (1998) *The Epistemology of the Cyrenaic School*, Cambridge: Cambridge University Press.
Tsouna, V. (2002) "Is there an exception to Greek eudaimonism?," in M. Canto and P. Pellegrin (eds.) *Le style de la pensée. Mélanges J. Brunschwig*, Paris: Les Belles Lettres: 464–89.
Tsouna-McKirahan, V. (1994) "The Socratic origins of the Cynics and Cyrenaics," in P. A. Vander Waerdt (ed.) *The Socratic Movement*, Ithaca: Cornell University Press: 367–91.
Warren, J. (2000) "Aristocles' refutations of Pyrrhonism (*PE* 14.18.1–10)," *Proceedings of the Cambridge Philological Society* 47: 23–46.
Warren, J. (2001) "Epicurus on the pleasures of the future," *Oxford Studies in Ancient Philosophy* 21: 135–79.
Zilioli, U. (2012) *The Cyrenaics*, Durham: Acumen Press.

Related chapters

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41. Sextus Empiricus

30
THE STOIC SYSTEM: ETHICS AND NATURE

Thomas Bénatouïl

Stoicism holds that morality and happiness can and should be learned from nature only: securing them does not require any struggle with our nature (or part of it) but results from its full development. The task of philosophy is therefore to make the voice of nature explicit, to explain it and help us to follow it (Cicero *Fin.* 3.11). This position has been criticized by many ancient adversaries of the Stoics as widely implausible, and by modern philosophers such as Hume, Kant or Moore as insufficient to ground the specificity and autonomy of moral judgments. The Stoics claim however that their doctrine is the only one to acknowledge the absolute value of moral behavior. They therefore naturalize morality while having a very strict notion of it, two positions which most philosophers, ancient or modern, hold to be incompatible, because they judge naturalism to be a form of reductionism.

The Stoics see their philosophy as the only true "system," namely as a tightly organized set of logically connected doctrines (Cicero *Fin.* 3.48 and 74), accounting for the structure of reason and of the world, which they also define as "systems" (Epictetus *Dis.* 1.20.5 and Diog. Laert. 7.138 quoting Posidonius, and Goldschmidt 1979: 60–64). The main division of the Stoic system is between ethics, physics, and logic. This systematic organization combined with Stoic naturalism obviously suggests that ethics is tightly connected to physics, which is the study of nature and the world. This connection is however difficult to establish and understand, for reasons which are typical of the problems one is faced with when studying Stoicism.

First of all, the writings of the Hellenistic Stoics (Zeno, Cleanthes, Chrysippus, Antipater of Tarsus, Diogenes of Seleucia or Babylon, Panaetius, Posidonius, and other less important authors) were lost during late Antiquity. Therefore, we have only bits and pieces of doctrines, sometimes quotations from specific books, that were reported by later authors for various purposes. We also have longer summaries of parts of the system by Cicero and Diogenes Laertius, but we do not know how they were composed and what their sources were. Even though we know many Stoic doctrines, it is thus ironically quite difficult to reconstruct the Stoic system as a whole, in the sense of knowing how its three parts were related to each other, and how each was organized in its own right, and taught.

On the first problem, we are told by Diogenes Laertius (7.39–41) that physics, logic and ethics were compared to the parts of a living being, which indicates an organic or functional connection between them. Does this also imply a hierarchy? Diogenes goes

on to testify to the existence of several ways of ordering the three parts among Stoics. However, these orders do not seem to offer a ranking of each part, they rather address "the better presentation or more effective teaching of philosophical doctrines" (Ierodiakonou 1993: 70).

This has two consequences. First, the attested adoption by different Stoics or by one author, like Chrysippus, of different orders is not very problematic: it reflects at worst pedagogical disagreements, but can also testify to the use of various modes of exposition of philosophy adapted to different contexts and audiences. Second, the fact that one part comes after another according to a given author does not mean that he held the former to be subordinate to the latter: pedagogical orders do not need to follow the logical order, if there is one. One usually learns first what is easier to grasp and last what is most fundamental, as was observed by Aristotle (*An. post.* 1.2, 72a1–5).

Chrysippus seems to have done so with physics. According to Plutarch (*Stoic. repug.* 1035A–F), he said that physics was to be taught last, and compared theology, the last subpart of physics, to an initiation to religious mysteries. Plutarch holds this to be incompatible with Chrysippus' statements to the effect that physics is the best principle or point of departure (*archē*) for ethics. But these statements are referred to physical treatises: as observed by Brunschwig (1991), they therefore do not mean that Chrysippus sometimes treated physics before ethics, but that he taught ethics in its own right and later explained, while teaching physics, that "one cannot make correct judgments about good and evil unless one understands the whole system of nature, and even the life of the gods, as well as the question of whether or not human nature is in harmony with that of the universe" (Cicero *Fin.* 3.73, trans. R. Woolf). We will deal with the meaning of this claim later, but at least two misinterpretations should be avoided right now.

First, ethics is not restricted to the theory and practice of morality. As we shall see, explanations of animal or human behavior as well as some observations about nature as a whole were thought by the Stoics to belong to ethics, whereas we might prefer to classify them under psychology or biology. Stoic physics is concerned mainly with explaining the structure of the world, the nature and action of god, and the causes of various natural phenomena (Diog. Laert. 7.132–133).

Second, arguing for ethical doctrines without resorting to physical claims remains possible, frequent and not reserved for beginners, if only because these arguments are also required in debates with rival doctrines, the proponents of which do not accept Stoic physics and must be refuted on other grounds. Although they cannot fully explain nature or virtue, such strictly ethical presentations of Stoic ethics are not provisional or superficial; they are already systematic and can be confirmed and completed, but not revised, when based upon physics.

How are they themselves to be ordered, however? This is again not easy to ascertain. We are fortunate to have three presentations of Stoic ethics, one by Cicero (*Fin.* 3), one by Diogenes Laertius (7.84–131) and one by Stobaeus (2.57–116), who copies a summary which probably dates back to Arius Didymus, a Stoic philosopher from the first century AD. These three presentations are quite different in style, content, and structure, as shown for example by Anthony Long (1996: ch. 5), and scholars have taken the habit of following the presentation they deem best or of devising their own.

We know however, thanks to Diogenes Laertius (7.84), that Chrysippus and many other important Stoics "divide the ethical part of philosophy into (i) the topic of impulse, (ii) that of good and bad things, (iii) that of passions, (iv) of virtue, (v) of the

end, (vi) of primary value and actions, (vii) of encouragements to what is fitting and discouragements" (trans. A. A. Long and D. N. Sedley modified according to a suggestion by Inwood, 1999: 113). Cicero, Diogenes, and Stobaeus-Arius do not follow this order of topics, but their divergence from it can be explained by the purpose of their exposition or by the hypothesis that they follow Stoic sources which adopted a different order. I therefore disagree with the majority of scholars, who dismiss this order as incomplete or unreliable (see, for example, Schofield 2003: 237–239). Like the order of the three parts, this order of ethical topics was obviously neither compulsory nor common to all Stoics and might even have been used by Chrysippus and his followers only in specific pedagogical contexts. Nevertheless, it has, it seems to me, enough credentials to be preferred to any other adopted or hinted at by our sources. Moreover, following it has a better chance of giving us insights about the specificity of the Stoic treatment of ethics, than relying on our own idea of how ancient ethics should be organized. Conforming to this order obviously still involves some speculation, since we do not know exactly which doctrines or notions each topic covered, but this chapter will try to show that their order of succession is meaningful and can be used to cover almost the whole of Stoic ethics. We will then inquire into the specific bearings of physics on ethics.

Ethical doctrines

Impulse

Cicero (*Fin.* 3.16–18) and Diogenes (7.85–86) also start their presentation of Stoic ethics by dealing with "impulse" (*hormē*). This is typical of Stoic naturalism, since impulse together with representation (*phantasia*) are the two faculties which distinguish animals, who have a "soul," from lower natural beings like plants and stones. The Stoics observe that babies are attracted spontaneously and as soon as they are born to what is appropriate to them (*oikeion*), for example suitable food, and recoil from what is not, for example predators. This is opposed to the rival Epicurean view that animals are driven by the securing of pleasure and the avoidance of pain: Stoics object to this interpretation that animal babies do not shy away from pain when acquiring their natural abilities (Seneca *Ep.* 121). The Stoics explain this by the fact that animals have a natural affinity, appropriation or affiliation (*oikeiōsis*) to themselves: they perceive themselves, their parts and using these parts as dear to themselves, so much so that their "first impulse" is to preserve themselves. This allows the animal to distinguish immediately in its environment between "natural things" (*ta kata phusin*), which participate in its preservation, and "unnatural things."

In Diogenes, who seems to quote Chrysippus' *On ends*, and in the *Elements of Ethics* (col. VI.29–54) by the Stoic Hierocles (early second century AD), animal appropriation to themselves is established not only on the basis of observations of their behavior but also by a demonstration eliminating alternate options (animals being alienated to themselves or having no positive or negative feelings toward themselves) as "not likely" to be chosen by "nature," or as ruining as "vain" the efforts made by "nature" to bring the animals to birth. This might be taken to indicate that providential nature, already plays a role here. The cautious phrasing of the argument suggests otherwise: the "Nature" referred to here is not yet the full-fledged Stoic notion, but Nature as everyman knows it, the sum and network of the various natural beings. Because of its regularity or fruitfulness, this Nature can be supposed to be efficient and invoked as such in

ethical arguments, but the knowledge of its essence and workings is reserved for physics. We shall see further signs of this tactic.

A similar mix of observations and argument about the consistency of Nature is used to establish a second aspect of animal and human nature, namely the appropriation of parents to their offspring, which leads the former to care spontaneously for the latter as long as they need (Cicero *Fin.* 3.62–66). This shows (Reydams-Schils 2005: ch. 2) that not only self-interest but also altruistic behavior stems directly from nature, this second appropriation being the basis of all social relationships, from families to cities and states up to the fellowship of all human beings, all of which are thus natural (Cicero *Off.* 1.53–54), even if the larger communities need reason to be perceived and respected.

Stoic naturalism does not hesitate to hold and commend as spontaneous and natural many actions we would deem acquired, and to argue for that view on the basis of animal or infant behavior (see Brunschwig 1986, Striker 1996: ch. 13). Stoicism is in particular very original in attributing a form of consciousness to animals and in suggesting that human rationality, although substantially different, is the full development of this primary connection to oneself rather than a break from animal nature. Cases of animal altruism are even given as intimations of more complex conducts among men, including devotion to one's country, teaching others or helping humanity. This is problematic, and not only from our modern point of view. The Stoics' adversaries from the Academy argue that Stoic naturalism is flawed because virtues often require that we turn our back on our first impulses, for example, when we endure illness or face a sure death with courage, or when we favor our fellow-citizens over ourselves or our kin out of respect for justice.

Stoics thus must account for the transition from our first impulses to virtue (Goldschmidt 1979: 55–60). The description of this process was probably distributed between all the ethical topics, especially the first five from impulse to the end, which seem to cover the various steps of moral progress, as we shall see presently. For clarity's and brevity's sake, we must however give a general account of this process now. It is described in an important and much discussed testimony by Cicero (*Fin.* 3.20–21, trans. A. A. Long and D. N. Sedley):

> Once this procedure of selection [of natural things] and rejection [of their opposites] has been discovered, the next consequence is selection exercised with what is fitting; then, such selection performed continuously; finally, selection which is absolutely consistent and in full accordance with nature. At this point, for the first time, that which can be truly called good begins to be present in a man and understood. For a man's first affiliation is towards those things which are in accordance with nature. But as soon as he has acquired understanding, or rather, the conception which the Stoics call *ennoia*, and has seen the regularity and, so to speak, the harmony of conduct, he comes to value this far higher than all those objects of his initial affection, and he draws the conclusion that this constitutes the highest human good which is worthy of praise and desirable for its own sake.

Human beings first behave like animals. But their natural "constitution" includes also a specific faculty, reason (*logos*), which develops as they grow up (see Ierodiakonou, this volume). Reason is not so much a new faculty of the soul as a new functioning of our representations and impulses (Long 1996: 244–247). A first effect of reason is to

make the principles of our animal self-appropriation explicit. Just as it articulates the content of our representations ("this is my friend Cato"), reason articulates each of our impulses as leading us to do "what is fitting" (*to kathēkon*) with respect to our situation, our nature and our goals ("I should salute Cato": see Stobaeus 2.86.17 and Inwood 1985: 42–101).

At first, this does not really change our behavior, but it means that we can act only after assenting, explicitly or implicitly, to the fact that it is fitting to act (Seneca *Ep.* 113.18). Our conduct therefore boils down to a sequence of applications of practical rules ("it is now fitting to do so and so"), which we learned from nature, our experience or others, and which we approved in various particular situations. Since one of reason's defining features is its sensitivity to coherence and contradiction, we perceive sooner or later the inconsistencies existing in this practical sequence and are inclined to eradicate them by specifying the scope and rank of each of our practical rules. Life is therefore like a Socratic dialogue, in which we try to answer each situation, however new or troubling, without contradicting ourselves (Diog. Laert. 7.48, Epictetus *Dis.* 3.8.1). This systemization of our impulses makes our conduct less inconstant, less irresolute and less dependent on circumstances and, if completed, can lead some men or women to achieve perfect consistency with themselves and with the world, namely virtue.

Good and bad things

According to Cicero's testimony, the understanding of what is truly good is the conclusion of moral development. What Cicero calls the "regularity and harmony of conduct" is in fact what is honorable (*to kalon*), defined as what is in itself worthy of praise. In Greek, *kalon* means "beautiful" as well as "noble" or "moral." The Stoics take this first meaning seriously and hold that we naturally and empirically form the latter concept by transferring visible qualities, like beauty and order, to actions (Cicero *Off.* 1.14–15, *Fin.* 2.45–47 and 3.33–34). "Nature" as we observe it daily appears again here as a basis of ethical reasoning. Like aesthetic judgments but in a different domain, moral judgments grant intrinsic and absolute value to formal properties taken independently of their consequences.

According to the Stoics, only what is honorable is "good" (*agathon*). Chrysippus based this view on the notion (*ennoia*) of the good common to all men (Plutarch *Stoic. repug.* 1041E and Diog. Laert. 7.53), by showing that all the properties of the good apply, strictly speaking, only to what is honorable. What is good is useful and benefits us, which suggests that health, beauty or wealth are goods. Following Socrates (Plato *Euthyd.* 279a–281a), the Stoics emphasize that these things can harm us if they are not used correctly (Diog. Laert. 7.103). Since the good must be intrinsically good and always benefit us, only the knowledge of how to use things, namely virtue, is good, and only vice is bad. Bodily or external advantages are therefore not goods and the lack of them or their opposites is not bad: they are only "indifferent" (*adiaphora*).

By articulating common notions with the help of logical reasoning, the Stoics thus reach paradoxical conclusions. But can we really hold that all the things the vast majority of men desire are not good? Another argument attributed to Chrysippus goes like this (Plutarch, *Stoic. repug.* 1039C, and Cicero *Fin.* 3.27): "What is good is chosen, what is chosen is approved, what is approved is praised, what is praised is honorable (*kalon*)." If what we desire is not worthy of public approval, that is, moral, it is not really or fully desirable for us and cannot be good.

These arguments were much criticized by the adversaries of the Stoics, because they seem merely dialectical and do not give any motivating reason to hold as indifferent to our happiness the many bodily or external advantages or disadvantages we usually care about so much (Cicero *Fin.* 4.52). That the Stoics did not ignore this problem might be indicated by the fact that they treated the topic of passions right after the topic of the good and before the topic of virtue. Passions stem from errors about what is good and bad, and thus account for the gap we experience between our daily impulses or opinions and Stoic doctrines about the good, even once we have acknowledged their persuasiveness on some level.

Passions

Failures to achieve moral progress indeed raise a real problem in Stoicism, because they are unnatural and, at the same time, pervasive, since only a very limited number of persons actually became "sages" according to the Stoics. It must be in part in order to dissolve this apparent contradiction that the Stoic doctrine of passions was much developed. The Stoics define passion (*pathos*, pl. *pathē*) as an excessive and irrational impulse. This does not mean however that passions come from a part of the soul opposed or alien to reason, that should be tamed to allow reason to guide our conduct. Against Plato and Aristotle, the Stoics hold that there is no such division in the soul and that all impulses come from its ruling part, namely mind or reason. But how can reason produce irrational impulses?

There is in fact a distinction to be made between right reason, which is perfectly consistent, and the reason most men follow: "the rational animal is perverted, sometimes by the plausibility of external things and sometimes by the influence of his neighbors, since nature gave [him] resources which are not perverted" (Diog. Laert. 7.89) (Graver 2007: 149–160). Human nature has no original defect and is capable by itself of reaching virtue: the perversion of reason comes from the outside. First, there are things which look similar, for example, pleasure and the good or glory and what is honorable (Cicero *Leg.* 1.32). People whose minds are not sharp enough do not distinguish between these things. This shows us again how good conduct is akin to dialectical expertise: it implies avoiding mistakes and assenting carefully in tricky situations. This is why logic was taught first and deemed necessary for ethics (Cicero *Fin.* 3.72: see Ierodiakonou, this volume). The second cause of our mistakes is social pressure: education, customs or public opinion lead us to hold many beliefs which are false, for example that death is a terrible thing (Cicero *Tusc.* 3.64).

When we assent to such representations repeatedly, we are not just making a mistake, we are committing ourselves to a certain view of the world and building a disposition in us, which will guide our behavior henceforth and is bound to trouble us deeply because of its irrationality (Nussbaum 1994: 375–383). Passions are thus excessive impulses which we are responsible for nurturing but which eventually escape our control, as with people running: "the movement of their legs exceeds their impulse, so that they are carried away and unable to change obediently, as soon as they have started to do so. Something similar, I think, takes place with impulses, owing to their going beyond the rational proportion" (Chrysippus quoted by Galen, *PHP* 4.2.14).

Passions are more precisely analyzed into four basic types: distress, fear, pleasure, and appetite, which can in turn be divided in many subtypes. Distress and fear are caused by the opinion that a bad thing is respectively present or coming. Pleasure and appetite

are caused by the opinion that a good thing is respectively present or expected. But, for each type, the passion really occurs only if we assent to a second opinion concerning the fitting reaction to the thing in question (Cicero *Tusc.* 4.61–62). For example, "distress is a fresh opinion that something bad is present at which people think it right to be contracted" (Andronicus *On passions* 1). The ensuing excessive and irrational impulse can be appeased by persuading the person that the second opinion is false, that is, that he does not have to react like he does (*Tusc.* 4.76), but he will be really cured only when he rejects the first opinion by applying the Stoic definition of the good. Thus, virtue is strictly incompatible with passions, which involve conflict with oneself. The sage can however feel "good emotions" (*eupatheiai*) stemming from virtue and is therefore not characterized by an inhuman insensibility (Graver 2007: ch. 2–3).

Virtue

Virtue is the disposition to do what is fine or noble and the excellence of human nature, that is to say perfect reason and the absolute consistency of soul and conduct. Since the Stoics do not divide the soul into a rational and one or more irrational parts, like Socrates and unlike Aristotle (Alesse 2000: 233–262) they do not need to distinguish between intellectual and moral virtues. They define virtue as being a "science," namely an unshakable system of true and firm representations (Diog. Laert. 7.89–90). From this, they infer that there is no intermediate state or continuous transition between vice and virtue and that no action is good or bad in itself: the consistency of one's conduct being the criterion of goodness, everyone who does not achieve absolute consistency is vicious (Cicero *Fin.* 3.48) and all their actions are equally bad (Diog. Laert. 7.120). It is thus neither the result nor the intention of actions which make them good, but their stemming from a virtuous or harmonious soul.

But what about the various virtues distinguished by men and philosophers? Zeno acknowledges their existence but defines them as applications of wisdom (*phronēsis*) in different practical fields. This ambiguous doctrine led Zeno's disciples to diverging interpretations of the unity of virtues (Plutarch *Virt. mor.* 440E–441D, *Stoic. repug.* 1034C and 1046E, Diog. Laert. 7.92 and 125–126), probably inspired by Socrates' arguments in the *Protagoras* (Cooper 1999: 90–107). Aristo of Chios insisted on the substantial unity of virtue, and held prudence, justice, courage and moderation to be merely names given to this universal science "in relation" to the various actions it produces. Chrysippus developed against Aristo the position that virtues "entail each other": they are qualitatively different but nevertheless share their principles and their goals. For example (Stobaeus 2.63.10), being moderate requires not only having healthy impulses, but also taking into account what other people deserve or which situations should be endured, which are the primary objects respectively of justice and courage. Therefore, it is impossible to have one virtue without the others. This allows the Stoics to distinguish numerous virtues subordinate to the four cardinal ones, without destroying the unity of virtue. The Stoics not only held physics and logic to be virtues (Cicero *Fin.* 3.72–73 and Menn 1995) but also defined virtues concerned with specific behavior or fields.

This is because Stoic virtue is also the "art of living," namely a skill which allows its possessor to perform correctly all her actions, from the daily ones to the rarest, and to deal adequately with every situation, missing no opportunity to reach her goals and remaining consistent and untroubled during her whole life, like a comedian or a dancer able to play adequately all the parts they are given while keeping their own style (Cicero

Fin. 3.24–25). This strange conception of virtue as all-encompassing and all-powerful is required to understand the doctrine that the possession of virtue is necessary and sufficient to secure happiness (Bénatouïl 2006: parts 3–4). The virtuous person is fully happy, whatever his physical, financial or social situations or the duration of her life (Diog. Laert. 7.127 and Plutarch *Comm. not*. 1061F). These paradoxes are typical of Stoic ethics.

The end

Our final end (*telos*) is generally considered to be the "entry-point" of ancient ethical doctrines from Aristotle onwards (see *Eth. Nic*. 1.1–5), as argued thoroughly by Julia Annas (1993: 27–46). It may thus come as a surprise that the section on the end comes so late in the Stoic division of ethics. This is probably because only the sage is really capable of "making sense of [her] life as a whole"—to borrow again one of Annas' phrases—organizing it around a final end and grasping what that end should be. This does not mean that human beings are not usually concerned with how they live their life. On the contrary, as explained above, they are naturally led to such concerns once they acquire reason, but these concerns are not cast in terms of choosing a single final end, but rather in terms of directing our impulses toward what is fitting and consistent. It is the notion of the good which plays, in Stoicism, the role that the *telos* plays in Aristotle, namely that of a basic notion from which ethical reasoning can take its start. Although Cicero alludes to the human *telos* very early in his presentation, he makes it clear that grasping what this end is constitutes the achievement of moral progress (*Fin*. 3.21).

At first sight, however, the Stoic definition of the end looks neither technical nor radical: the *telos* consists in "living in agreement with nature" (Diog. Laert. 7. 87–89). What does this mean? First, it shows again the crucial importance of consistency. Stobaeus (2.75.11) notes that Zeno was content with a shorter definition: "living in agreement," which meant "living in accordance with one concordant reason, since those who live in conflict are unhappy," whereas "happiness is a good flow of life" (2.77.16).

The reference to nature in the definition is nevertheless also very important. Stobaeus says that it was added by Cleanthes, because he felt Zeno's short definition was incomplete. But Diogenes Laertius (7.87) indicates that Zeno used the long formula in his treatise, *On the nature of man*, and meant by it "living virtuously, for nature leads us towards virtue." This might be another reason why the Stoics preferred to define the final end after the good and virtue: the equivalence between happiness and virtue is secured only through the identification of the good and what is honorable. But what is the function of "nature" in this equation? Zeno and his successors gave a lot of thoughts to this question: Cleanthes probably specified the meaning of "nature" in the definition as referring to cosmic nature only, rather than add the word itself, whereas Chrysippus took the word to refer both to human and cosmic nature (Diog. Laert. 7.89).

This leads us in contended territory. Some scholars, like Anthony Long (1996: ch. 6) or Gisela Striker (1996: ch. 12) think that the appeal to cosmic nature and divine reason in Diogenes (7.88) is crucial to the demonstration that living in accordance with virtue is the end. Others, like Julia Annas (1993: 159–179) or Christopher Gill (2006: 145–166) offer Cicero's account (*Fin*. 3.20–21 quoted above) as evidence that theological premises are not needed here, and that living in accordance with nature is just another name for living in accordance with reason. This discrepancy between our

sources probably reflects different presentations of Stoic ethics, but they are far from incompatible: there is a middle road here, as already suggested.

First, the explicit appeal to divine reason can be considered as a physical argument meant to complete strictly ethical conclusions. This does not mean that this argument is dispensable, it is on the contrary fundamental: we will come back to it later. Second, this does not imply that "nature" is confined to human nature at this stage. Note that Cicero says that reaching what is truly good requires to act "consistently and in accordance with nature." If "nature" just meant human nature or reason here, the second condition would repeat the first, because Stoic rationality consists in coherence. It refers therefore rather to adapting one's conduct and desires to what happens in the world. Yet, in this passage, no specific knowledge of physics is mentioned, although being truly virtuous will ultimately require it. "Living in accordance with virtue is equivalent to living in accordance with experience of what happens by nature, as Chrysippus says in *On ends* book 1" (Diog. Laert. 7.89). Chrysippus probably means that being virtuous is equivalent not only to being fully rational, but also to deal wisely with the various events of the world to which we belong. Note again here the phrasing avoids any theological commitment, which becomes explicit only in the following sentences (quoted below), which *argue* for this conception of the end.

This nevertheless raises many problems, some of which were seized by the Stoics' adversaries from the Academy. They claimed that Zeno borrowed the formula "life in accordance with nature" from his Academic master, Polemo, but misunderstood it completely. They argued that human nature is not geared solely toward virtue: it includes impulses directed toward natural things (like health), which should not be ignored in the *telos* (Cicero *Fin.* 4.26–27). The Stoics answered that including anything (be it pleasure, health or scholarly leisure) alongside virtue in the end would first compromise the absolute primacy of what is honorable over every other motive, and second make our happiness depend on chance, since securing health or wealth is not entirely up to us, whereas virtue is (Cicero *Fin.* 3.11 and *Acad.* 2.138–140).

The Academics, however, also objected that accordance with virtue is too general a criterion to guide our life (*Fin.* 4.40–41): it has nothing to say about what we should do in relation to natural things (which are "indifferent" according to the Stoics), except maybe when getting or avoiding these things involves a base action. To answer this objection, the Stoics emphasized that virtue allows the sage to make distinctions between natural and unnatural things. That is why Chrysippus' successors specified the meaning of "living according to nature" and explained that the end amounts to "reasoning well in the selection and de-selection of natural things" (Diogenes of Babylon) or "to do everything in one's power continuously and undeviatingly with a view to obtaining the predominating natural things" (Antipater of Tarsus) (Stobaeus 2.76.9, Striker 1996: ch. 14). The consistency of rational activity is still predominant in these two formulas, but natural things are acknowledged as the daily materials of virtue. This however led to another Academic objection (Plutarch *Comm. not.* 1070F–1071E): there now seem to be two ends, namely living virtuously and obtaining the natural things.

Primary value and actions

On the one hand, the Stoics acknowledge that, according to our first impulses, some corporeal or external things are natural. On the other, they hold that all corporeal or

external things are indifferent to our happiness. Like the Academics (*Fin.* 4.78) and before them, some of Zeno's pupils saw these two tenets as incompatible and kept only one: Aristo of Chios for example was famous for sticking to the second tenet and holding that the end consists in being indifferent, namely behaving in the same manner, towards everything that is neither virtuous nor vicious (Diog. Laert. 7.160 and Ioppolo 1980: 142–202).

Zeno's naturalism developed by Chrysippus and his successors is, however, based on the idea that the two tenets are compatible. They explained that, despite being neither good nor bad, natural things can be judged by the sage to have some "value" (*axia*) inasmuch as they contribute to living a "natural life" (Stobaeus 2.83.10–85.11). Natural indifferents like health are thus granted an intermediate position between unnatural indifferents, to which they can be "preferred," and goods, to which they remain absolutely subordinate. To summarize this doctrine and emphasize its practical import, some Stoics said that the good is "chosen" whereas natural things are "selected," hence the use of this latter verb in Diogenes' and Antipater's definitions of the end. The sage has committed her whole life unconditionally to virtue, but her daily decisions are about things which are neutral from the point of view of this commitment (Brennan 2003: 279–292). If she is ill, should she go to the doctor or not? She should, because "health" has value, but this selection does not grant health any substantial part in happiness: health is just preferred *over* illness *in normal circumstances*. Sometimes, illness should be selected, because getting cured is either not possible or requires being vicious or implies being inconsistent with one's past decisions. To emphasize this, the Stoics say that the "value" of the good is either utterly disproportionate or qualitatively different from the value of natural things (Cicero *Fin.* 3.34 and 45).

Encouragements to what is fitting and discouragements

Therefore, while usually selecting natural things, the sage never depends on them, because she knows exactly when to let them go and how to cope with their opposites. These various uses of indifferent things were codified and discussed by the Stoics as "fitting actions" (*kathēkonta*, sing. *kathēkon*). *Kathēkon* is a technical notion invented by the Stoics and embodies perfectly their naturalism, since it plays a role from the first to the last level of moral progress, and thus manifests the continuity of this process (Goldschmidt 1979: 125–132). What is fitting is defined as "consequentiality in life, something which, once it has been done, has a reasonable justification." The main basis for this justification being the natural constitution of the being performing the action, which can be a human is but also an animal or a plant (Stobaeus 2.85.13 and Diog. Laert. 7.107).

Once we have reason, as explained earlier, our impulses are triggered by what seems fitting to us and are carried out into action provided we assent to their object being indeed fitting. Moral progress then consists in learning what is fitting for rational beings in various circumstances, and performing it. Looking after one's health, honoring one's parents, marrying, having children or defending one's country are fitting actions, because they are in accordance with human nature. But they are not *always* fitting, because special circumstances can make these actions unfitting. The only thing which is always fitting is "living virtuously" (Diog. Laert. 7.108–109). If I do what is fitting most of the time, but fail to do it once in a while or simply waver about what to do, I am not virtuous yet (Stobaeus 5.906.18). Thus, virtue requires that I have an intellectual

and mental disposition that guarantees that I will always do the right thing without hesitation in every *possible* situation.

Stoic philosophers did not hold themselves to be virtuous, but they claimed to teach how to progress toward virtue: they offered concrete models of behavior to be imitated, like Socrates, but they also deemed it useful to elaborate specific rules derived from their view of human nature and from experience (Sedley 1999). The doctrine of fitting actions gave birth to a parenetic and sometimes casuistic literature offering "precepts" about various fields, especially those pertaining to social life (Reydams-Schils 2000): when to engage in politics (Diog. Laert. 7.121), how to behave towards one's parents, during a symposium, how to marry (Hierocles in Stobaeus 4.67.21–24), how to make a gift (Seneca *Ben.*). The Stoics nevertheless knew that virtue could never be captured into a set of rules, however complex: precepts help us to act fittingly, but are only "flexible guidelines for moral reasoning" (as argued by Inwood 1999), and not moral laws.

Ethics with physics

What can physics add to this presentation of ethics based on common notions, logic and experience? While acknowledging that physics supplements ethics, Julia Annas downplayed its ethical import: "What we get from the wider [that is, cosmic] perspective is increased understanding of a subject whose content has been established without that wider perspective" (1993: 165). This view has been criticized by Inwood (1995) as relying too much on a modern notion of ethics inspired by Kant. The importance of "increased understanding" cannot be underestimated in so intellectualistic an ethics as the Stoic one, where virtue is defined as the only true science and philosophy as a system. Let us try and list how physics can complete ethics.

For a start, physics can provide a causal account of many facts which are ethically relevant. According to the Stoics (Long 1996: ch. 10), the soul is not incorporeal but is a specific type of body, called "breath" (*pneuma*) and made of air and fire, which is blended with our organic body and thus accounts for its various vital functions. In his *Elements of Ethics* (col. III.55–IV.55), Hierocles gives an account of the nature of the soul and its constant physical interaction with the body, in order to prove that animal self-perception is constant. This "psychophysical holism" (Gill 2006: part I) is also crucial to the topic of passions: they are both judgments and physical movements of the soul, and build up in it as diseases, which were accounted for in physical terms by Chrysippus (Tieleman 2003: 146–166, 186–197). In this case, physics provides us not only with a better explanation of our soul but can also suggest cures for its bad dispositions. Furthermore, virtue itself has a physical dimension (Bénatouïl 2005): it is a "tension" which is "adequate in the soul to achieve what is fitting" (Cleanthes in Plutarch *Stoic. repug.* 1034C). This mental strength allows the sage to withstand all attacks and illusions, so much so that, once acquired, virtue cannot be lost (Diog. Laert. 7.127–128) and allows the soul to survive its separation from the body (Pseudo-Plutarch *Opinions of philosophers* 4.7.3). Physics is here used to prove the very possibility and power of wisdom, which is a natural, albeit exceptional, phenomena.

The most debated contribution of physics to ethics, however, comes from cosmology and theology. The Stoics hold god to be an eternal, corporeal and rational "active principle" which crafts the world as a whole from a passive prime matter, and then pervades every part of the world to hold it together and cause everything in it according to a

necessary and rational plan (Diog. Laert. 7.134–139, see Hahm 1977 and Salles 2009). How is this relevant to ethics?

First, cosmology strengthens and supplements all the previous arguments about human nature: if we are products of divine reason, our nature must indeed be consistent and a reliable guide to find what is good for us. Second, proving the existence and providence of god vindicates the virtue of piety (Cicero *Fin.* 3.73) and explains what and how to believe in traditional religion by giving philosophical interpretations of myths and rites (see Algra in Salles 2009).

Third, our end does not lie only in our full development as human beings. Diogenes (7.89) gives us probably Chrysippus' argument for his definition of "the end":

> For our own natures are part of the nature of the whole. Therefore, living in agreement with nature comes to be the end, which is in accordance with the nature of oneself and that of the whole, engaging in no activity wont to be forbidden by the universal law, which is the right reason pervading everything and identical to Zeus, who is the director of the administration of existing things.
>
> (trans. Long and Sedley)

This appeal to cosmic nature may not be a legitimate ethical argument to the eyes of philosophers like Hume or Kant, but it is no doubt an important one in ancient Stoicism (Betegh 2003, Boeri 2009). It answers at least one crucial objection, which can be found in Callicles (Plato *Grg.* 492a–c) or Nietzsche: why should virtue and consistency be any better than the satisfaction of as many and diverse desires as possible? For the Stoics, reason is the law of nature: human excellence and happiness is therefore neither the unlimited satisfaction of the strongest (Callicles in *Grg.* 483C–E) nor the strict obedience to the laws and customs of one's city (see Schofield 1999). "The world is like a city, consisting of gods and men, with the gods serving as rulers and men as their subjects" (Arius Didymus in Eusebius, *Praep. evang.*15.15.4, trans. Long and Sedley). The sage follows a principle at work in the whole universe and, in so doing, assists the gods in ruling it.

Fourth, everything that happens to us is also made by god: we are parts of a divine rational and necessary plan, that we should not only endure but welcome, even when it hinders our first impulses (Cooper 1999: 442–444). Epictetus (*Dis.* 2.6.9) quotes Chrysippus saying:

> As long as the future is uncertain to me, I always hold to those things in accordance with nature, for god himself made me disposed to select these. But if I actually knew that I was fated now to be ill, I would even have an impulse to be ill. For my foot too, if it had intelligence, would have an impulse to get muddy.

This passage shows clearly how theology vindicates human reason both in its following natural impulses and in its turning its back on them when required by the course of nature as a whole.

Chrysippus seems however to acknowledge that theology does not provide us with any criterion about how to act, since we do not know our fate. This is probably because Chrysippus does not consider himself a sage, but also because practical rules, be they

ethical or theological, cannot be substituted for virtue. When Zeno tripped and fell in his old age, he is said to have quoted a verse from Euripides, "I come, why do you call me?," and died on the spot by holding his breath (Diog. Laert. 7.28). Did he know god wanted him to die? Probably not and he could have decided to go and see the doctor, to preserve his health, but he took his fall at this moment as a sign, both physical and divine, that he was getting too old to live, and showed his freedom by anticipating the call, like a good actor improvising within the guidelines given by the author and thus collaborating with him.

This could be taken to mean that the Stoic sage does not need to know Nature in any detail to follow it, as the dissident Stoic Aristo of Chios—who dismissed physics and logic—claimed (Diog. Laert. 7.160, Ioppolo 1980: 78–90). Against this view, Chrysippus insisted on the "experience" of Nature in his formula of the end (Diog. Laert. 7.87). Accordingly, the Stoic poet Aratos lists and praises in his *Phenomena* the many signs offered by Zeus in the sky or the earth to help men in their daily labors, like navigation and agriculture. No natural being, as base as it may seem, should be ignored: even flies are useful as a sign of rain (973–975). From meteorology to divination, from geology and mining to medicine, knowledge of nature is the best way to second divine providence by revealing its presence in every details and helping humanity to flourish thanks to the various arts (Posidonius in Seneca *Ep.* 90.11–12, Cicero *Nat. D.* 2.150–161).

All this does not ultimately imply that ethics is ancillary to physics; Chrysippus both says that physics is the best starting point for ethics and that "transmitting physical doctrines has no other purpose than to discriminate between good and evil" (Plutarch, *Stoic. repug.* 1035D). The Stoics do not advocate the study or contemplation of Nature as an end in itself, unlike Aristotle. Thus, in a sense, physics is ancillary to ethics.

In fact, there is no absolute hierarchy between the three parts but an organic solidarity or mutual dependency between them. We insisted on the fact that the end and virtue cannot be fully understood and achieved without being referred to the divine administration of the world. But note that divine providence towards men can be proved to exist only if all our misfortunes are not bad things and our happiness depends on virtue alone (Epictetus *Ench.* 31 and Bénatouïl 2009: 41). Another example is the way in which physics, ethics and logic mutually support each other in order to make fate, namely complete causal determinism, human agency and moral responsibility compatible according to Chrysippus (Cicero *Fat.* 13–45, Bobzien 1998: ch. 3–6). Thus, ethics, physics and logic support each other like the stones in a vault or like the virtues in the sage's systematic mind (see Goldschmidt 1979: 64–66 and Gill 2006: 162–166, 197–199).

References and further reading

Ancient texts

The testimonies concerning Hellenistic Stoicism are collected in:

Alesse, F. (1997) *Panezio di Rodi: Testimonianze*, Naples: Bibliopolis.

Edelstein, L. and Kidd, I. G. (1989) *Posidonius, Volume I: The Fragments*, Cambridge: Cambridge University Press.

Von Arnim, J. (ed.) (1979, 1st edn. 1905), *Stoicorum Veterum Fragmenta*, Stuttgart: Teubner, 4 volumes.

The most important testimonies about Stoic Ethics are translated into English in:

Annas, J. (ed.) (2001) *Cicero: On Moral Ends*, trans R. Woolf, Cambridge: Cambridge University Press.
Inwood, B. and Gerson, L. P. (2008) *The Stoics Reader: Selected Writings and Testimonia*, Indianapolis: Hackett.
Kidd, I. G. (1999) *Posidonius, Volume IV: The Translation of the Fragments*, Cambridge: Cambridge University Press.
Long, A. A. and Sedley, D. N. (1987) *The Hellenistic Philosophers*, Cambridge: Cambridge University Press, 2 volumes.
Ramelli, I. (2009) *Hierocles the Stoic: Elements of Ethics, Fragments and Excerpts*, trans. D. Konstan, Atlanta: Society of Biblical Literature.

Secondary literature

Alesse, F. (2000) *La Stoa e la tradizione socratica*, Naples: Bibliopolis.
Annas, J. (1993) *The Morality of Happiness*, Oxford: Oxford University Press.
Bénatouïl, T. (2005) "Force, fermeté, froid: la dimension physique de la vertu stoïcienne," *Philosophie antique* 5: 5–30.
Bénatouïl, T. (2006) *Faire usage: la pratique du stoïcisme*, Paris: Vrin.
Bénatouïl, T. (2009) "How Industrious Can Zeus Be? The Extent and Objects of Divine Activity in Stoicism," in R. Salles (ed.) *God and Cosmos in Stoicism*, Oxford: Oxford University Press: 23–45.
Betegh, G. (2003) "Cosmological Ethics in the *Timaeus* and Early Stoicism," *Oxford Studies in Ancient Philosophy* 24: 273–301.
Bobzien, S. (1998) *Determinism and Freedom in Stoic Philosophy*, Oxford: Clarendon Press.
Boeri, M. (2009) "Does Cosmic Nature Matter? Some Remarks on the Cosmological Aspects of Stoic Ethics," in R. Salles (ed.) *God and Cosmos in Stoicism*, Oxford: Oxford University Press: 173–200
Brennan, T. (2003) "Stoic Moral Psychology," in B. Inwood (ed.) (2003) *The Cambridge Companion to the Stoics*, Cambridge: Cambridge University Press: 257–94.
Brunschwig, J. (1986) "The Cradle Argument in Epicureanism and Stoicism," in M. Schofield and G. Striker (eds.) *The Norms of Nature: Studies in Hellenistic Ethics*, Cambridge: Cambridge University Press: 113–44.
Brunschwig, J. (1991) "On a Book-Title by Chrysippus: 'On the Fact that the Ancients Admitted Dialectic along with Demonstrations,'" *Oxford Studies in Ancient Philosophy*, Supplementary volume: 81–96.
Cooper, J. (1999) *Reason and Emotion: Essays on Ancient Moral Psychology and Ethical Theory*, Princeton, NJ: Princeton University Press.
Gill, C. (2006) *The Structured Self in Hellenistic and Roman Thought*, Oxford: Oxford University Press.
Goldschmidt, V. (1979) *Le système stoïcien et l'idée de temps*, 4th edn., Paris: Vrin.
Graver, M. R. (2007) *Stoicism and Emotion*, Chicago, IL: University of Chicago Press.
Hahm, D. E. (1977) *The Origins of Stoic Cosmology*, Columbus, OH: Ohio State University Press.
Ierodiakonou, K. (1993) "The Stoic Division of Philosophy," *Phronesis* 38: 57–74.
Ierodiakonou, K. (ed.) (1999) *Topics in Stoic Philosophy*, Oxford: Clarendon Press.
Inwood, B. (1985) *Ethics and Human Action in Early Stoicism*, Oxford: Clarendon Press.
Inwood, B. (1995) "Review of Julia Annas, *The Morality of Happiness*," *Ancient Philosophy* 15: 647–665.
Inwood, B. (1999) "Rules and Reasoning in Stoic Ethics," in K. Ierodiakonou (ed.) *Topics in Stoic Philosophy*, Oxford: Clarendon Press: 95–127, reprinted in *Reading Seneca* (2005), Oxford: Oxford University Press.
Inwood, B. (ed.) (2003) *The Cambridge Companion to the Stoics*, Cambridge: Cambridge University Press.
Ioppolo, A.-M. (1980) *Aristone di Chio e lo stoicismo antico*, Naples: Bibliopolis.
Long, A. A. (1996) *Stoic Studies*, Cambridge: Cambridge University Press.
Menn, S. (1995) "Physics as a Virtue," *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 11: 1–34.
Nussbaum, M. C. (1994) *The Therapy of Desire: Theory and Practice in Hellenistic Ethics*, Princeton, NJ: Princeton University Press.
Reydams-Schils, G. (2005) *The Roman Stoics: Self, Responsibility, and Affection*, Chicago, IL: The University of Chicago Press.
Salles, R. (ed.) (2009) *God and Cosmos in Stoicism*, Oxford: Oxford University Press.
Schofield, M. (1999) *The Stoic Idea of the City*, 2nd edn., Chicago, IL: University of Chicago Press.

Schofield, M. (2003) "Stoic Ethics," in B. Inwood (ed.) *The Cambridge Companion to the Stoics*, Cambridge: Cambridge University Press: 233–56.
Sedley, D. (1999) "The Stoic-Platonist Debate on *kathêkonta*," in K. Ierodiakonou (ed.) *Topics in Stoic Philosophy*, Oxford: Oxford University Press: 128–52.
Striker, G. (1996) *Essays on Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press.
Tielemann, T. (2003) *Chrysippus' On Affections: Reconstruction and Interpretation*, Leiden: Brill.

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31
THE STOIC SYSTEM: LOGIC AND KNOWLEDGE

Katerina Ierodiakonou

Introduction

1 The subject matter and aim of Stoic logic

The Stoic use of the term "logic" (*logikē*) is not as restricted as our modern use of the same term. The Stoics perceived of logic as a part of philosophy, alongside physics and ethics (Diogenes Laertius 7.39–41), and in their opinion its subject matter spanned the study of reason (*logos*) as expressed in all kinds of articulate speech.

The Stoics divided logic into rhetoric (*rhetorikē*) and dialectic (*dialektikē*) (Diog. Laert. 7.41–6). Rhetoric is the art of speaking well in the form of whole, continuous speeches. Dialectic, on the other hand, is the art of conducting discussions by means of short questions and answers; it is also defined, in a broader sense, as the science of what is true, what is false, and what is neither true nor false. Dialectic itself is subdivided into the topics of utterance and significations. The study of utterance includes linguistic and grammatical phenomena. The study of significations covers what is said by using all sorts of utterances, but mainly declarative sentences, that is, propositions, the relations between them, the arguments composed of them, and especially the validity of such arguments. It also covers how we distinguish true from false impressions, because it is on the basis of criteria for true impressions that we are able to determine which propositions are true. Hence, although it is Stoic dialectic which most closely corresponds to our conception of logic, the Stoics included under dialectic disciplines that we would nowadays refer to as theory of knowledge, philosophy of language, grammar, and linguistics (Gourinat 2000: 69–107).

Thus defined, Stoic logic provides us with a systematic knowledge of the rules of rationality that can assist us to think and discuss clearly and correctly, as well as protect us from being misled by fallacious arguments in all kinds of rational discourse. More generally, the aim of Stoic logic is the establishment of a true and stable understanding of the world, an understanding which is supposed to be essential to human beings if they are to survive and live a well-reasoned and ordered life (Diog. Laert. 7.46–8). That is why the Stoics came to think of logic as a particularly important part of philosophy, and that is why they insisted that the philosopher must be, more than anything else, a dialectician (Diog. Laert. 7.83). Given the Stoics' belief in the rationality of nature, logic turns out to be not only inseparable from the other parts of philosophy, but a prerequisite for the proper comprehension of the physical world as well as a necessary

component of a moral life. For, whereas the end of physics is knowing the world and its order, and that of ethics is living in accordance with the natural order, logic aims at distinguishing the true from the false, and thus makes it possible to find out the truths in the domains of reality which belong to the other parts of philosophy (Long 1978).

To show the special role of logic in the interrelation between the three parts of philosophy, the Stoics compared logic to the shell of an egg, to the surrounding wall of a fertile field, to the fortification of a city, or to the bones and sinews of a living being (Diog. Laert. 7.40; Sextus Empiricus *Math.* 7.19). These similes, however, should not be interpreted as implying that logic, according to the Stoics, is merely an auxiliary instrument as in the Aristotelian tradition. In fact, there seems to have been a considerable dispute in late antiquity over the issue of whether logic is a part or just an instrument of philosophy, a dispute which helps us to reconstruct the reasoning behind the Stoics' insistence on regarding logic as an integral constituent of philosophy (Alexander *in An pr.* 1.4–4.29; Ammonius *in An pr.* 8.15–11.21; Philoponus *in An. pr.* 6.19–9.20). Given the subject matter and aim of their logic, the Stoics had every reason to believe that it does not simply provide the other sciences with demonstrative methods; rather, Stoic logic deals with a particular domain of reality of its own, which is distinct from those of physics and ethics, namely it deals primarily with propositions and their interrelations.

2 Stoic logicians and their background

In the Hellenistic period ancient philosophers first became interested not only in understanding bodies of knowledge but in the question of the possibility of knowledge itself (Annas 1990; Frede 1999). The Epicureans and the Stoics were foundationalists in the sense that knowledge, according to them, is possible and has its origins in our grasp of some basic truths upon which the rest of our knowledge can securely rest. They defended the thesis that there are certain states of a person, for instance impressions of a certain kind, which by their nature are reliably, indeed infallibly, indicative of a fact about the world. They called a state of this kind a "criterion of truth" (*kritērion tēs alētheias*), a means or instrument which enables us to judge the truth; and they suggested different criteria which are supposed to safeguard the possibility of knowledge.

As far as the Stoic logical system is concerned, the prevailing view in the nineteenth century was that it should be considered as a mere supplement to Aristotle's logical theory. Stoic logic, so it was alleged, does nothing more than either copy Aristotelian logic or develop it in a vacuous and formal way. It is only towards the middle of the twentieth century, after the important advances in symbolic logic, that it has become obvious that the Stoics constructed a logical system to prove the validity of a whole class of arguments of a different kind from those Aristotle focused on in his syllogistic (Frede 1974b; Barnes 1999).

Chrysippus was particularly instrumental in the development of logic and the Stoic theory of knowledge. It was said that he became so renowned in dialectic that it was the general opinion that if the gods had dialectic, it would be no different from that of Chrysippus (Diog. Laert. 7.180). Indeed, to confirm Chrysippus' reputation as the principal Stoic logician, one needs only to go through the long list of logical works attributed to him (Diog. Laert. 7.189–98; see Barnes 1996). But Chrysippus was not alone among the Stoics in his interest in dialectic. Although it is likely that Zeno, before Chrysippus, was not a logician in the sense that he constructed a formal logical system, he was interested

in establishing the possibility of knowledge and used valid arguments of a considerable level of logical complexity in order to establish his philosophical doctrines (Schofield 1983; Ierodiakonou 2002). Also, logical studies in the Stoic school certainly did not die with Chrysippus. There is some evidence that Stoic philosophers, like Posidonius and Epictetus, made further additions to the Chrysippean system and even diverged from Chrysippus' logical theses on lesser issues (Barnes 1997).

The Stoic theory of knowledge

1 Impressions

According to the Stoics, human beings possess a sensory apparatus through which they can become fully aware of the external world. The external objects under appropriate conditions affect our sense organs, and these affections are then transmitted within the body to the soul, and in particular to its commanding or leading part, that is the mind. Taking into account the Stoic view that the soul is corporeal, the impressions which we thus receive actually constitute physical states that provide us with some kind of knowledge of the surrounding environment. Hence, the starting point in the Stoic theory of knowledge is the notion of *phantasia*, which is usually translated either as "impression" or as "appearance;" "appearance" keeps the connection to the verb *phainesthai*, "to appear," whereas "impression" follows Cicero's translation of the Greek term as "*impressio*" and alludes to Zeno's definition of *phantasia* as "an imprint on the soul" (Diog. Laert. 7.45). Besides, since the introduction of the wax-block image in Plato's *Theaetetus* (191c8–192c6), many philosophers, and not only in antiquity but throughout the history of philosophy, have used the image of imprints on wax in order to talk about impressions in the soul.

There is plenty of evidence that Chrysippus disagreed with his Stoic predecessors and in particular with Cleanthes, about the appropriateness of the wax-block image in explaining the Stoic definition of impressions. Sextus Empiricus, for instance, gives the following report of the disagreement between Chrysippus and Cleanthes:

> So, according to them, an impression is an imprint on the soul; and they differed immediately about this. For Cleanthes took "imprint" in terms of depression and elevation—just like the imprint on wax made by seal-rings. But Chrysippus thought that such a view was absurd. For first, he says, this will require that when our mind has impressions at one time of a triangle or a tetragon, the same body will have to have in itself at the same time different shapes—triangular and tetragonal together, or even round—which is absurd. Next, since many impressions exist in us at the same time, the soul will also have many configurations. This is worse than the first problem. [Chrysippus] himself speculated, therefore, that "imprint" was used by Zeno to mean "alteration"; so that the definition becomes like this: "An impression is an alteration of the soul"; for it is no longer absurd that the same body at one and the same time (when many impressions exist in us) should receive many alterations. For just as the air when many people speak at once, receiving at one time an indefinite number of different blows, also has many alterations, so too the commanding part of the soul will experience something similar when it receives varied impressions.
>
> (Sext. Emp. *Math.* 7.228–31; trans. B. Inwood and L. P. Gerson with changes)

Chrysippus' argument is clear: if impressions are understood to be like imprints on wax, then we cannot explain how at the same time we may have many and different, or even conflicting, impressions; hence, impressions should rather be understood as modifications or alterations of the soul. That is to say, the soul as a whole, in coming to have an impression, becomes disposed differently than it was disposed before, in the sense that it is made to change in such a way as to think of what the impression is an impression of differently than before; and nothing prevents it from becoming differently disposed in many ways at the same time, even concerning the same object.

Nevertheless, in both Cleanthes' and in Chrysippus' interpretation of the Stoic notion of *phantasia*, what is significant is that the cause of the impression which we acquire through the senses is actually the external object. It is called a *phantaston*, that is, an impressor, and should be understood as the objective empirical source which triggers in us the process of obtaining knowledge, although the impression which it provides us with does not yet in itself constitute knowledge. To elucidate the connection between the impression and the impressor, the Stoics made use of an analogy to light: an impression is an illumination of the corresponding external object, for it reveals both itself and the object in the sense that it makes us aware of what has caused it (Aetius *Plac*. 4.12.1–5). Notice that the ancient sources do not attribute to the Stoics the view that an impression is some kind of mental picture of what is perceived. Rather, an impression is said to be an affection of the soul that should be thought of as a representation, which makes known to us itself as well as something in the external world. But the fact that it is such a representation does not mean that it is some kind of image or likeness; for there are many forms of representation, of which some do not in any way involve likeness, for instance symbolic representations. Furthermore, given their role as representations, impressions as a class are distinguished from other affections of the soul which do not arise from an impressor; they are distinguished from affections of the soul that arise from the imagination of a figment, that is, a *phantasma*, as in the case of dreams and hallucinations (Diog. Laert. 7.50).

The Stoics suggested various ways of distinguishing between different kinds of impressions (Diog. Laert. 7.51; Sext. Emp. *Math*. 7.242–6). The fundamental distinction is that between rational (*logikai*) and non-rational (*alogai*) impressions; most animals have non-rational impressions, whereas human beings after the age of seven or fourteen have rational impressions. For, according to the Stoics, reason emerges over time in the course of our natural development as a result of the acquisition of conceptions which are formed through a procedure involving experience and thought. More specifically, the Stoics described the emergence of reason in human beings in a way very similar to what Aristotle had said on the same subject (*Metaph*. A.1, 980a27ff.; *An. post* 2.19, 99b36ff.). Particular memories are obtained as a matter of the successful retention of impressions in the human soul, many similar memories result in experience, and on the basis of such experience we come to possess notions or conceptions (*ennoiai*) of things; some conceptions are naturally acquired, and the Stoics called them, following the Epicureans, "preconceptions" (*prolēpseis*), for example, the conception of the color pink, some are culturally determined or technical, for example, the conception of a car (Brittain 2005; Dyson 2009; Crivelli 2010):

> When a man is born, the Stoics say, he has the commanding part of his soul like a sheet of paper ready for writing upon. On this he inscribes each one of his conceptions. The first method of inscription is through the senses. For by

> perceiving something, for example, white, they have a memory of it when it has departed. And when many memories of a similar kind have occurred, we then say we have experience. For the plurality of similar impressions is experience. Some conceptions arise naturally in the aforesaid ways and undesignedly, others through our own instruction and attention. The latter are called "conceptions" only, the former are called "preconceptions" as well.
>
> (Aetius *Plac*. 4.11.1–3; trans. A. A. Long and D. N. Sedley)

Thus reason starts to grow slowly; for once we have simple conceptions, they naturally give rise to more complex ones, which in turn will enable us to have even more complex ones. In fact, some of the more complex conceptions are obviously not direct derivatives of sensory (*aisthētikai*) impressions; rather, we get them by various thought processes, like the processes of similarity, analogy, transposition, combination, opposition, transition, or privation (Diog. Laert. 7.53). For example, the conception of a Cyclops is formed by magnification from that of a man, while the conception of death by opposition. This is the reason why the Stoics claimed that from our rational impressions some are obtained directly through the senses, whereas others are obtained through thought. And this is why in the beginning the human soul has no content, but it has the ability to acquire a sufficiently rich set of conceptions, in terms of which it starts to think of things rationally, and thus human beings come to be distinguished from non-rational animals.

It should be stressed, however, that the distinction between sensory and non-sensory rational impressions does not imply that there are rational impressions which represent their objects in ways that do not presuppose conceptions; even the most primitive rational impression, like the impression of a pink car, already involves the representation of its object by means of conceptions. Rational impressions may be passive affections of the soul, but they involve already the operation of the mind; for they always presuppose conceptions, which ultimately arose during our childhood from sensory impressions that were not rational. So, rational impressions are thoughts (*noēseis*), and as thoughts they have a propositional content; when we say that we grasp an external object, what we really mean is that we grasp the fact "that something is the case."

2 Knowledge and the criteria of truth

As thoughts rational impressions present themselves to the human mind, and the mind either accepts or refuses to accept them. For as human beings develop, they come to have a critical distance from their impressions, since they often realize that their impressions might be false. Thus, according to the Stoics, the emergence of reason also involves the emergence of a new ability, the ability to give or to withhold assent (*sunkatathesis*), that is, to have the belief that the proposition which forms the content of the impression is true or false. The Stoics claimed that there are different kinds of assent, and Zeno is reported to have used a famous simile to illustrate them:

> Zeno used to clinch the wise man's sole possession of knowledge with a gesture. He would spread out the fingers of one hand and display its open palm, saying "An impression is like this." Next he clenched his fingers a little and said, "Assent is like this." Then, pressing his fingers quite together he made a fist,

> and said that this was cognition (and from this illustration he gave that mental state the name *katalēpsis*, which it had not had before). Then he brought his left hand against his right fist and gripped it tightly and forcefully, and said that knowledge was like this and possessed by none except the wise man.
>
> (Cicero *Acad.* 2.145; trans. A. A. Long and D. N. Sedley with minor changes)

Note that Zeno did not claim that assent is followed by cognition, which is in turn followed by knowledge. Rather, he suggests that assent, cognition, and knowledge are alternative reactions to impressions: assent refers to the mind's acceptance of any impression, regardless of its epistemological status, cognition is assent that cannot be wrong, and knowledge is assent that always remains unshakeable.

Cognition (*katalēpsis*) arises only when the mind assents to a special kind of impressions, the so-called "cognitive impressions" (*katalēptikai phantasiai*). The Stoics define cognitive impressions as imprints on the soul that:

(i) arise from what is;
(ii) are imprinted and impressed on the soul in exact accordance with what is; and
(iii) could not arise from what is not.

(Cicero *Acad.* 2.18; 77; Diog. Laert. 7.46; Sext. Emp. *Math.* 7.248; 402)

Leaving aside for the time being the third clause, let us examine more closely the other two (Sedley 2002). In the first place, the cognitive impression must come from an existing object; in other words, the external object the impression presents itself as a cognitive impression of, should be a real object rather than a figment of our imagination. Second, the impression must be according to that existing object; a Stoic example of an impression that is not according to the existing object is that of Elektra received by the mad Orestes, for in so far as he had an impression of an existing thing it was true, but in so far as he had an impression of a Fury it was false. It seems that the second clause is supposed to amount to the requirement that the impression be clear and distinct, as opposed to obscure and confused (Diog. Laert. 7.46; Sext. Emp. *Math.* 7.171–3; 257–8; 403–4; 408). So, when we receive an impression of a car such that we are able to say "I see a car," although we are not able to discern all its properties, our impression may be true but it is non-cognitive because it is unclear. As to the distinctness of cognitive impressions, this feature corresponds to the fact that cognitive impressions represent their objects in such detail as to fit only them. Hence, cognitive impressions, being the most accurate form of impressions, were said to be evident (*enargeis*).

It is, of course, the case that cognitive impressions directly guarantee only the truth of their own propositional content. On the other hand, they also give rise to the conceptions which the mind forms naturally on the basis of cognitive impressions, and which in turn allow us to have further cognitive impressions. Moreover, the truth of the propositions certified by cognitive impressions will guarantee the truth of further propositions derived by deductive inference, that is, by demonstration, from the former propositions. Cognitive impressions, therefore, guarantee the truth of whatever can be known by human beings. Indeed, by establishing the possibility of knowledge on the mind's assent to cognitive impressions, the Stoics gave them a very central role in their theory of knowledge, namely that of the criterion of truth (Diog. Laert. 7.54).

The Stoics, just like the Epicureans, believed that we can secure the possibility of our knowledge of the external world by postulating criteria that help us discriminate truth from falsehood. But although the Epicureans claimed that all of our sensory impressions are true and have the status of such a criterion, the Stoics denied that all sensory impressions are true, and put forward the thesis that it is only our cognitive impressions which may constitute the basis of our knowledge. They even denied that all true sensory impressions are cognitive; for if one perceives an object under abnormal conditions, there is no guarantee that the impression one receives, even if it should happen to be true, necessarily is true. That is to say, truth cannot be the distinctive characteristic of cognitive impressions that is responsible for their exclusive place as the Stoic criterion of truth; rather, cognitive impressions were regarded as such because they are evident. For the Stoics insisted that in order for an impression to serve as a criterion of truth, it not only has to be true, but it also has to be guaranteed to be true; and they assumed that cognitive impressions are those which, given the way they come about, cannot fail to be true. If, for instance, we perceive an object under normal conditions, the cognitive impression we receive is guaranteed to be true, since cognitive impressions are evident.

According to the Epicureans, sensory impressions constitute reliably faithful representations of the external objects, because they are true, and hence evident. The Stoics, on the other hand, specified as a further requirement for cognitive impressions to be evident that they should reveal the external objects in a clear and distinct way. In other words, given that the Stoics assumed that no two objects are qualitatively completely alike, when we receive a cognitive impression of an external object, it not only faithfully represents the external object which is its cause, but more importantly, it represents the external object in a way which allows us to discern all the features of that object in such detail that no other object could match that impression. This may suggest a subtle shift in the understanding of the notion of something's being evident; for in the case of cognitive impressions, it seems to become at least in part a matter of an intrinsic distinctive character of the impression itself, though the precise nature of this character remains unclear. And it seems that this is the point on which the Skeptics focused in order to rebut the Stoic attempts to secure a reliable basis for knowledge by appealing to the evident character of cognitive impressions.

More specifically, the Skeptics seriously questioned the Stoic doctrine that there actually are cognitive impressions and that human beings can distinguish them from non-cognitive ones (see Vogt, this volume). Since we are commonly prone to assenting also to unclear and confused impressions, the Skeptics argued, it could be really difficult for us to determine which among our impressions do in fact have the privileged status of a cognitive impression. The Stoic reply to this Skeptic challenge, which probably triggered the third clause of the definition of cognitive impressions, seems to indicate that it is nature herself that provides us with the possibility of distinguishing cognitive from non-cognitive impressions; cognitive impressions are irresistible to the human mind, such that they force our assent automatically by a causal process, and not on the basis of an argument. Indeed, it has been suggested that the Stoics defended the view that the intrinsic distinctive mark of cognitive impressions is a causal feature they have which is independent of the external object and which makes the mind react in a distinctive way, so that it is able to discriminate cognitive and non-cognitive impressions (Frede 1983; Hankinson 2003). To support this, some Stoic illustrations have been brought to our attention that allude to the strength of the causal relation between cognitive

impressions and their instantaneous acceptance by the mind; for instance, the Stoics claimed that cognitive impressions are instantaneously ceded to like weights by a scale (Cicero *Acad.* 2.38), grasp us as if by our hair (Sext. Emp. *Math.* 7.257), and differ from other impressions in the way horned snakes differ from other snakes (Sext. Emp. *Math.* 7.252).

Even this suggestion, however, raises various questions. For instance, what is it in human nature which brings it about that we are seized by the evidence of cognitive impressions? Also, if the human mind assents to cognitive impressions automatically, why did the Stoics say quite generally that it is up to us whether we assent or refrain from assenting to impressions? Given these difficulties, there is a temptation to think that, precisely because cognitive impressions stand in a privileged relation to the external object, we can learn to recognize the intrinsic distinctive character in virtue of which they are evident. For the evident character of cognitive impressions seems to be, according to the Stoic theory of knowledge, not a matter of subjective feeling or conviction. If it produces conviction, it is a conviction which is based on the recognition of a feature of impressions which they objectively have, because they are appropriately related to the external objects to be known (Lefebvre 2007; Ierodiakonou 2011).

The Stoics never seem to have addressed the Skeptics' question whether there actually are cognitive impressions. They assumed that there must be such impressions, if there is to be knowledge, and that nature has constructed things in such a way that we have such cognitive impressions which in no way misrepresent the external objects. It is only in this way that they could defend their view that knowledge is possible and that it ultimately comes from the senses. Of course, what the Stoics presupposed here is that the corresponding conditions for the production of cognitive impressions are indeed normal. And there is sufficient evidence that at some point the Stoics gathered the conditions establishing normality under five headings: the condition of the sense organ, that of the object, its placing, the way the object is sensed and the agent's state of mind must all be in a normal condition (Sext. Emp. *Math.* 7.424). So, even if the Stoics never defined knowledge by making use of the notion of normality, normal conditions were meant to be necessary and sufficient for its production.

As mentioned earlier, the Stoics claimed that only the wise man has the systematic and rationally grounded knowledge (*epistēmē*) that remains unshakeable, in the sense that one cannot be persuaded to withdraw by any argument to the contrary. Nevertheless, not even the wise man is in a position to know all truths, but only those whose truth is guaranteed by cognitive impressions; for if his ability to avoid false belief is unlimited, his ability to know is certainly restricted. So there are many impressions which the wise man does not give assent to, but at least there are no false impressions which he accepts as true. On the other hand, the ordinary person has ignorance (*agnoia*), because he is prone to emotional disorder caused by his passions and he cannot avoid falsehood. Even the truths of which he has cognition are not really firm and lack the coherence and systematicity which characterize knowledge; in this sense ignorance is treated as the contradictory of knowledge. However, the ignorance of the ordinary person is due, according to the Stoics, not only to weak assent to cognitive impressions, but also to assent to non-cognitive impressions; it is then treated as mere opinion (*doxa*) and is defined as assent to false or unclear impressions. Still, many of these opinions, though not knowledge, are true or even cognitive, and thus afford the ordinary man a basis to acquire knowledge (Sext. Emp. *Math.* 7.151–2).

KATERINA IERODIAKONOU

The Stoic logical system

1 Sayables and assertibles

Knowledge presupposes, for the Stoics, assent of a certain kind to rational impressions or thoughts; and to give assent to a rational impression is to have the belief that the proposition which forms the content of the impression is true. That is to say, we assent to rational impressions by assenting to their corresponding propositions, what the Stoics called "assertibles" (*axiōmata*), which can be true or false. But in order to fully grasp the Stoic definition of an assertible, we first need to get some idea about a more basic Stoic notion, the notion of a sayable (*lekton*).

The term "*lekton*" is derived from the verb "*legein*," that is, "to say," and it is what has been or gets said or something which can be said. In their linguistic theory the Stoics posited three things that are linked together; namely, an expression which signifies something (*sēmainon*), that which is signified (*sēmainomenon*), and the external object (*tunchanon*):

> There was another disagreement among philosophers [concerning what is true]: some took the sphere of what is true and false to be "the signification," others "utterance," and others "the process that constitutes thought." The Stoics defended the first opinion, saying that three things are linked together, "the signification," "the signifier," and "the name-bearer." The signifier is an utterance, for instance "Dion"; the signification is the actual state of affairs revealed by an utterance, and which we apprehend as it subsists in accordance with our thought, whereas it is not understood by those whose language is different although they hear the utterance; the name-bearer is the external object, for instance, Dion himself. Of these, two are bodies—the utterance and the name-bearer; but one is incorporeal—the state of affairs signified and sayable, which is true or false.
>
> (Sext. Emp. *Math.* 8.11–2; trans. A. A. Long and D. N. Sedley)

So, the states of affairs signified are the sayables, which are placed between mere vocal sounds or written sentences, on the one hand, and the objects in the world, on the other; roughly speaking, sayables are the underlying meanings in everything we say and think, what we understand but foreigners do not, though they hear the spoken word. But not everything which gets thought gets said, and not everything which can be said gets thought. There are indeed many things which never get thought or said, although they are there to be thought or said. In other words, Stoic sayables are not mind-dependent items; at the same time, though, they certainly do not exist in the way bodies exist in the world. The Stoics stressed that sayables are incorporeal, like void, place, and time (Sext. Emp. *Math.* 10.218), and in order to characterize their mode of being, they introduced the notion of subsistence (*huphistanai*), as opposed to existence (*einai*). Reality, they claimed, is not just constituted by corporeal entities, but also by predicates true of bodies and propositions true about bodies. Hence, in Stoic ontology sayables are given some status, namely the status, not of bodies, but of incorporeal somethings; they are defined as what subsists in accordance with a rational impression, that is as the content of our thoughts (Sext. Emp. *Math.* 8.70; see Frede 1994).

The Stoics divided sayables into complete and incomplete (Diog. Laert. 7.63). Incomplete sayables include predicates, for instance what is meant by "sleeps." Complete sayables include questions, oaths, invocations, addresses, commands, curses; but the most important kind of complete sayables are declarative sentences or propositions, for instance "Socrates sleeps," and this the Stoics called an "assertible" (*axiōma*) (Diog. Laet. 7.65; Sext. Emp. *Outlines of Pyrrhonism* 2.104). An assertible is mainly defined by the fact that it is the kind of item that in saying this sort of thing one is asserting something, and it differs from other kinds of complete sayables by the property of being true or false. Being a particular class of sayables, assertibles do not exist as bodies do, but they can be said to subsist. In addition, the Stoics make a further distinction: if an assertible is false, it only subsists, but if it is true, it is a fact and thus also can be said to exist (*huparchein*). In this sense, true assertibles correspond to the world's having certain features, and they are available to be thought and expressed whether anyone is thinking about them or not. On the other hand, since false assertibles are said only to subsist, the philosophical question of how false statements and thoughts are possible gets a reasonable answer; false assertibles are the contradictories of facts, and hence have some status.

The main characteristic of the Stoic logical system is that the inferences which it studies are about relations between assertibles which have the structure of propositions (Mates 1953; Frede 1974a; Bobzien 1999; Ierodiakonou 2006). Whereas Aristotle focused his attention on inferences which involve relations between terms, and thus introduced a logical system similar to what we nowadays call "predicate logic," Stoic logic marks the beginning of what is now called "propositional logic." To say, though, that Stoic logic is propositional may be somewhat misleading, since the Stoics have quite a different understanding of what a proposition is. For instance, while propositions are timelessly true or false, Stoic assertibles are asserted at a particular time and have a particular tense. That is to say, an assertible can in principle change its truth-value without ceasing to be the same assertible; for example, the conditional "If Dion is alive, Dion will be alive" is an assertible that is not true at all times, for there will be a time when the antecedent will be true and the consequent false (Simplicius *in Phys.* 1299.36–1300.10). Also, since Stoic assertibles include token reflexive elements, like for instance "this" or "I," they may cease to exist and presumably also, though this is not clearly stated, begin to exist at definite times. For a Stoic assertible requires that its subject exists, otherwise it is said to be destroyed; for example, the assertible "This man is dead" is destroyed at Dion's death, if "this man" refers to Dion (Alexander *in An pr.* 177.25–178.1).

Finally, assertibles are divided into simple and non-simple assertibles (Brunschwig 1994). Simple assertibles are those which are not composed either of a repeated assertible or of several assertibles; they are subdivided into definite (for example, "This one sleeps"), indefinite (for example, "Someone sleeps"), and intermediate (for example, "It is day" or "Socrates sleeps") (Sext. Emp. *Math.* 8.93–8). In addition, the Stoics classified among simple assertibles three different kinds of negative assertibles: negations (for example, "Not: it is day"), denials (for example, "No one sleeps"), and privatives (for example, "This man is unkind") (Diog. Laert. 7.69–70). Note that the scope of the negative particle is, according to the Stoics, the entire assertible, which means that an assertible, for instance, of the form "It is not day" is treated as affirmative and not as negative. Hence, the negative particle "not" was not considered by the Stoic logicians as a connective; connectives bind together parts of speech, and the negative particle does not do that (Diog. Laert. 7.58).

Non-simple assertibles, on the other hand, are those which are composed either of a repeated assertible or of several assertibles which are combined by one or more connectives (Sext. Emp. *Math.* 8.95). The main types of non-simple assertibles studied by the Stoics are the following (Diog. Laert. 7.71–4; Sext. Emp. *Math.* 8.125–7):

1. A conjunctive assertible is one which is conjoined by the conjunctive connective "both … and …" (for example, "Both it is day and it is light"). A conjunctive assertible is true when all its conjuncts are true.
2. A disjunctive assertible is one which is disjoined by the disjunctive connective "either … or …" (for example, "Either it is day or it is night"). The Stoics understand the disjunctive relation as exhaustive and exclusive; that is to say, a disjunction is true when one and only one disjunct is true.
3. A conditional assertible is one linked by the conditional connective "if" (for example, "If it is day, it is light"). A conditional, according to the Stoics, is true when the contradictory of its consequent conflicts with the antecedent; for instance, the conditional "If it is day, it is day" is true, since the contradictory of its consequent "Not: it is day" conflicts with its antecedent "It is day."

The Stoics also discussed modal assertibles in their logic (Diog. Laert. 7.75). A possible assertible is that which admits of being true, and is not prevented by external factors from being true, for example, "Dion is alive." An impossible assertible is that which does not admit of being true, or admits of being true but is prevented by external factors from being true, for example, "The earth flies." A necessary assertible is that which is true and does not admit of being false, or admits of being false but is prevented by external factors from being false, for example, "Virtue is beneficial." A non-necessary assertible is that which is capable of being false, and is not prevented by external factors from being false, for example, "Dion is walking." A plausible assertible is that which invites assent to it, for example, "If someone gave birth to anything, she is its mother." A probable or reasonable assertible is that which has higher chances of being true than false, for example, "I shall be alive tomorrow" (Bobzien 1993).

2 Arguments

The Stoics define an argument (*logos*) as a complex or a compound of premises and a conclusion. The following is a typical Stoic argument (Diog. Laert. 7.76–7; Sext. Emp. *Pyr.* 2.135–6):

> If it is day, it is light.
> But it is day.
> Therefore it is light.

Moreover, the Stoics discussed arguments in terms of their modes (*tropoi*), which are the abbreviations of particular arguments; for instance, the mode of the previous argument is:

> If the first, the second.
> But the first.
> Therefore the second.

The ordinal numbers here stand for assertibles, and have exactly the same role as the letters of the alphabet in Aristotelian logic. Finally, the Stoics also used the so-called "mode-arguments" (*logotropoi*), in which the assertibles are given in full when first occurring, but are then replaced by ordinal numbers, obviously for purposes of simplicity and clarity:

> If Plato is alive, Plato is breathing.
> But the first.
> Therefore the second.

It was the orthodox Stoic view that an argument must have more than one premise, though it seems that some Stoics accepted single-premise arguments, as for instance (Sext. Emp. *Math.* 8.443; Apuleius *Int.* 184.16–23):

> You are seeing.
> Therefore you are alive.

Of arguments, some are valid, others invalid. Invalid arguments are those the contradictory of whose conclusion does not conflict with the conjunction of the premises (Diog. Laert. 7.77). For instance, the argument:

> If it is day, it is light.
> But it is day.
> Therefore Dion is walking.

is invalid, because the contradictory of its conclusion, that is, "Not: Dion is walking," does not conflict with the conjunction of its premises, that is, "Both if it is day it is light and it is day" (Sext. Emp. *Pyr.* 2.137; *Math.* 8.416, 421). Of valid arguments, some are just "valid," others "syllogistic" (*sullogistikoi*). The Stoics define syllogistic arguments as those which either are what they call "indemonstrable" (*anapodeiktoi*) or can be reduced to the indemonstrables (Diog. Laert. 7.78). Indemonstrable arguments, or simple syllogisms, are those whose validity is not in need of demonstration, given that it is obvious in itself (Diog. Laert. 7.79–81; Sext. Emp. *Pyr.* 2.157–8; *Math.* 8.223–7). The lists of indemonstrable arguments which are to be found in our ancient sources vary, but there is no doubt that Chrysippus himself distinguished five different types of such arguments:

(i) A first indemonstrable argument is constructed out of a conditional and its antecedent as premises, and the consequent as conclusion, for example,
If it is day, it is light.
But it is day.
Therefore it is light.

(ii) A second indemonstrable argument is constructed out of a conditional and the contradictory of its consequent as premises, and the contradictory of its antecedent as conclusion, for example,
If it is day, it is light.
But not: it is light.
Therefore not: it is day.

(iii) A third indemonstrable argument is constructed out of a negated conjunction and one of its conjuncts as premises, and the contradictory of the other conjunct as conclusion, for example,
Not: both Plato is dead and Plato is alive.
But Plato is dead.
Therefore not: Plato is alive.

(iv) A fourth indemonstrable argument is constructed out of a disjunction and one of its disjuncts as premises, and the contradictory of the other disjunct as conclusion, for example,
Either it is day or it is night.
It is day.
Therefore not: it is night.

(v) A fifth indemonstrable argument is constructed out of a disjunction and the contradictory of one of its disjuncts as premises, and the other disjunct as conclusion, for example,
Either it is day or it is night.
Not: it is day.
Therefore it is night.

In suggesting this particular list of the five types of indemonstrable arguments, Chrysippus was not trying to introduce the smallest possible number of different types of indemonstrable arguments. Rather, it seems that he included in his list all types of argument which just rely on the argumentative force of the different basic types of connectives known to him. In the case of the fourth and fifth indemonstrables, they just rely on what it means to use the disjunctive connective, namely to say that if one of the disjuncts holds the contradictory of the other holds too, and if the contradictory of one disjunct holds the other disjunct holds too.

To demonstrate the syllogistic validity of any argument whatsoever, the Stoic logicians considered it necessary to reduce it to one or more of the indemonstrable arguments, which are thus regarded as the first principles of the Stoic logical system. Indeed, there are several ancient texts which suggest that the Stoic logicians believed that all other arguments are thought to be validated by reference to the five indemonstrables (Diog. Laert. 7.79; Sext. Emp. *Pyr*. 2.156–7; 166–7, 194). Therefore, we may infer that some claim of completeness was made by the Stoic school, but it is not at all clear what precisely the Stoics' definition of completeness was, if they ever offered one (Mueller 1979; Milne 1995). The procedure of reducing non-simple syllogisms to indemonstrable arguments was called by the Stoics "analusis." To carry out this procedure, the Stoic logicians had at least four logical rules, the so-called "*themata*" (Diog. Laert. 7.78; Galen *Plac*. 2.3.18–19; Apuleius *Int*. 191.5–10; Alexander *in An pr*. 278.11–14). We know only the first and the third Stoic *thema*, and it is on the basis of extremely meager evidence that modern scholars have suggested their different reconstructions of the other two.

A Stoic example of a non-simple syllogism with three premises is the following (Sext. Emp. *Math*. 8.234–6):

If things evident appear alike to all those in like condition and signs are things evident, signs appear alike to all those in like condition.
But signs do not appear alike to all those in like condition.
And things evident do appear alike to all those in like condition.
Therefore signs are not things evident.

Its mode is:

If both the first and the second, the third.
But not the third.
But also the first.
Therefore not the second.

Sextus suggests that this argument can be reduced to two indemonstrables, namely to a second and a third indemonstrable, by going through the following steps:

(i) By combining the first premise with the second premise, we get a second indemonstrable:
If both the first and the second, the third.
But not the third.
Therefore not: both the first and the second.

(ii) By combining the conclusion of this indemonstrable with the third remaining premise, we get a third indemonstrable:
Not: both the first and the second.
But the first.
Therefore not: the second.

The logical rule which validates the use of the conclusion of the second indemonstrable in the construction of the third indemonstrable is the so-called "dialectical theorem," according to which the conclusion which is deduced from some of the premises of an argument is implicitly contained in the argument, though it is not expressly stated (Sext. Emp. *Math.* 8.231). This theorem, according to our ancient sources, is supposed to do the same job as the second, third, and fourth *themata* together (Alexander *in An pr.* 284.10–17).

Finally, a scientific demonstration or proof (*apodeixis*) is a syllogistic argument with true premises which by means of deduction reveals, that is, gives knowledge of, a non-evident conclusion (Sext. Emp. *Pyr.* 2.140–3). For instance, the following argument was treated by the Stoics as an example of a proof:

If sweat flows through the surface, there are ducts discoverable by thought.
But sweat flows through the surface.
Therefore there are ducts discoverable by thought.

It is exactly the revelation of this non-evident conclusion by the force of the premises that constitutes the requirement of a genuine proof, and it is this discovery after which knowledge aspires (Brunschwig 1980; Barnes 1980).

3 Paradoxes

Finally, there is abundant evidence of the Stoics' interest in solving the following logical paradoxes:

(i) The Liar

Various versions of the Liar paradox were known in antiquity, but there is no single text which gives us with certainty the precise formulation of the argument (Cicero *Acad.* 2.95; Gellius *NA* 18.2.9–10). A plausible reconstruction reads as follows: "If you say that you are lying, and you say so truly, you are lying, and if you are lying, you are telling the truth." Presumably it was Eubulides who invented this paradox in the fourth century, but there is no doubt that it was Chrysippus who more than anyone else in ancient times tried to solve it. The peculiarity seems to be, not only that we are not able to find out what the truth of the statement is, but also that in this case there is no truth of the matter. So perhaps Chrysippus' view was that in cases like this the statement is neither true nor false. However, if this is correct, the solution would put the very notion of an assertible under great pressure and would force a reconsideration of its definition (Cicero *Acad.* 2.95; Plutarch *Comm. not.* 1059D–E; see Cavini 1993; Mignucci 1999).

(ii) The Sorites

The name *Sorites* comes from the Greek noun "*sōros*," which means "heap" or "pile." This paradox exploits the vagueness of certain predicates, like for instance "heap": Is a single grain of wheat a heap? The answer is obviously "No." Are two grains a heap? The answer is again "No." If we continue adding one grain to the previous quantity we never get a heap (Galen *Med. exp.* 17.1). Chrysippus is reported to have claimed that this paradox does not pose any real difficulty, because the wise man knows at which moment he should stop replying to questions of the form "Are so-and-so many grains a heap?" (Cicero *Acad.* 2.94; see Bobzien 2002).

(iii) The Veiled Man

According to one version of this paradox (Lucian *Vit. auct.* 22), Chrysippus asks someone whether he knows his own father. The person replies that he does. Next Chrysippus asks him again what he would have said if a veiled man were to be placed in front of him and was asked whether he knows him. The same person replies that he would have said that he doesn't know him. Chrysippus concludes, if the veiled man were his father, the person would have thus admitted that he both knows and does not know his own father.

(iv) The Horned Man

In Diogenes Laertius (7.187) we find the following formulation of this paradox: "If you have not lost something, you have it still. But you have not lost horns. Therefore you still have horns."

Unfortunately, there is no evidence as to the way in which the Stoics tried to solve the last two paradoxes.

References

Primary sources

Aetius, *De placitis*, in *Doxographi Graeci* (ed.) H. Diels, (Berlin, 1879).
Alexander, *in Aristotelis Analyticorum Priorum librum I commentarium* (ed.) M. Wallies, *Commentaria in Aristotelem Graeca* 2.1 (Berlin, 1883).
Ammonius, *in Aristotelis Analyticorum Priorum Librum I commentarium* (ed.) M. Wallies, *Commentaria in Aristotelem Graeca* 4.6 (Berlin, 1899).
Galen, *De Placitis Hippocratis et Platonis* (ed.) Ph. De Lacy, *Corpus Medicorum Graecorum* V.4.1.2 (Berlin, 1978).
Galen, *On Medical Experience* (ed.) R. Walzer (Oxford, 1944).
Philoponus, *in Aristotelis Analytica Priora Commentaria* (ed.) M. Wallies, *Commentariain Aristotelem Graeca* 13.2 (Berlin, 1905).

References and further reading

Annas, J. (1990) "Stoic epistemology," in S. Everson (ed.) *Epistemology*, Cambridge: Cambridge University Press: 184–203.
Barnes, J. (1980) "Proof destroyed," in M. Schofield, M. F. Burnyeat and J. Barnes (eds.) *Doubt and Dogmatism*, Oxford: Clarendon Press: 161–81.
——. (1996) "The catalogue of Chrysippus' logical works," in K. A. Algra, P. W. Van der Horst, and D. T. Runia (eds.) *Polyhistor: Studies in the History and Historiography of Ancient Philosophy*, Leiden: Brill: 169–84.
——. (1997) *Logic and the Imperial Stoa*, Leiden: Brill.
——. (1999) "Aristotle and Stoic logic," in K. Ierodiakonou (ed.) *Topics in Stoic Philosophy*, Oxford: Clarendon Press: 23–53.
Bobzien, S. (1993) "Chrysippus' modal logic and its relation to Philo and Diodorus," in K. Döring and Th. Ebert (eds.) *Dialektiker und Stoiker*, Stuttgart: Franz Steiner Verlag: 63–84.
——. (1999) "Logic: the Stoics," in K. Algra et al. (eds.) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press: 92–157.
——. (2002) "Chrysippus and the epistemic theory of vagueness," *Proceedings of the Aristotelian Society* 102: 217–38.
Brittain, Ch. (2005) "Common sense: concepts, definition and meaning in and out of the Stoa," in D. Frede and B. Inwood (eds.) *Language and Learning*, Cambridge: Cambridge University Press: 164–209.
Brunschwig, J. (1980) "Proof defined," in M. Schofield, M. F. Burnyeat and J. Barnes (eds.) *Doubt and Dogmatism*, Oxford: Clarendon Press: 125–60.
——. (1994) "Remarks on the classification of simple propositions in Hellenistic logics," in his *Papers in Hellenistic Philosophy* (trans. J. Lloyd), Cambridge: Cambridge University Press: 57–71.
Cavini, W. (1993) "Chrysippus on speaking truly and the Liar," in K. Döring and Th. Ebert (eds.) *Dialektiker und Stoiker*, Stuttgart: Franz Steiner Verlag: 85–109.
Crivelli, P. (2010) "The Stoics on definition," in D. Charles (ed.) *Definition in Greek Philosophy*, Oxford: Oxford University Press: 359–423.
Dyson, H. (2009) *Prolepsis and Ennoia in the Early Stoa*, Berlin and New York: de Gruyter.
Frede, M. (1974a) *Die stoische Logik*, Göttingen: Vandenhoeck and Ruprecht.
——. (1974b) "Stoic vs. Aristotelian syllogistic," *Archiv für Geschichte der Philosophie* 56: 1–32.
——. (1983) "Stoics and Sceptics on clear and distinct impressions," in M. Burnyeat (ed.) *The Skeptical Tradition*, Berkeley, CA: University of California Press: 65–94.
——. (1994) "The Stoic notion of a *lekton*," in S. Everson (ed.) *Language*, Cambridge: Cambridge University Press: 109–28.
——. (1999) "Stoic epistemology," in K. Algra et al. (eds.) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press: 295–322.
Gourinat, J. B. (2000) *La dialectique des stoïciens*, Paris: Vrin.
Hankinson, R. J. (2003) "Stoic epistemology," in B. Inwood (ed.) *The Cambridge Companion to the Stoics*, Cambridge: Cambridge University Press: 59–84.
Ierodiakonou, K. (2002) "Zeno's arguments," in T. Scaltsas and A. S. Mason (eds.) *The Philosophy of Zeno*, Larnaca: The Municipality of Larnaca: 81–112.

——. (2006) "Stoic logic," in M. L. Gill and P. Pellegrin (eds.) *Blackwell Companions to Ancient Philosophy: A Companion to Ancient Philosophy*, Oxford: Blackwell: 505–29.
——. (2011) "The notion of *enargeia* in Hellenistic philosophy," in B. Morison and K. Ierodiakonou (eds.), *Episteme, etc.: Essays in Honour of Jonathan Barnes*, Oxford: Oxford University Press: 60–73.
Inwood, B. and Gerson, L. P. (1997) *Hellenistic Philosophy: Introductory* Readings Indianapolis, IN: Hackett.
Lefebvre, R. (2007) "Représentation et évidence: Les stoïciens face à leurs adversaires de l'Académie," *Elenchos* 28: 337–67.
Long, A. A. (1978) "Dialectic and the Stoic sage," in J. M. Rist (ed.) *The Stoics*, Berkeley, CA: University of California Press: 101–24.
Long, A. A. and Sedley, D. N. (1987 and 1989) *The Hellenistic Philosophers*, 2 vols., Cambridge: Cambridge University Press.
Mates, B. (1953) *Stoic Logic*, Berkeley, CA: University of California Press.
Mignucci, M. (1999) "The Liar paradox and the Stoics," in K. Ierodiakonou (ed.) *Topics in Stoic Philosophy*, Oxford: Clarendon Press: 54–70.
Milne, P. (1995) "On the completeness of non-Philonian Stoic logic," *History and Philosophy of Science* 16: 39–64.
Mueller, I. (1979) "The completeness of Stoic propositional logic," *Notre Dame Journal of Formal Logic* 20: 201–15.
Sedley, D. N. (2002) "Zeno's definition of *phantasia katalēptikē*," in T. Scaltsas and A. S. Mason (eds.) *The Philosophy of Zeno*, Larnaca: The Municipality of Larnaca: 135–54.
Schofield, M. (1983) "The syllogisms of Zeno of Citium," *Phronesis* 28: 31–58.
Striker, G. (1996) "*Kritērion tēs alētheias*," *Nachrichten der Akademie der Wissenschaften zu Gottingen*, I. Phil.-hist. Klasse 2 (1974): 48–110. Reprinted in G. Striker (1996) *Essays on Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press: 22–76.

Related chapters

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32. Epicurus' Garden: physics and epistemology
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32
EPICURUS' GARDEN: PHYSICS AND EPISTEMOLOGY

Tim O'Keefe

Introduction

Epicurean "physics" (from the Greek word *phusis*, or "nature") encompasses the study of the natural world in general. Thus, it ranges more widely than contemporary physics. It includes theorizing about the basic building blocks of the world, as well as cosmology, biology, and psychology. According to Epicurus, understanding the workings of the world is not good intrinsically, but only instrumentally, for the sake of securing peace of mind. Nonetheless, physics is invaluable, since it is impossible to have peace of mind while suffering from fear of the gods and fear of death, and natural science (*phusiologia*) is needed to dispel these fears (*Sent. Vat.* 11–13). It does so by showing us that the gods have nothing to do with the workings of the world and that death is simply annihilation, and hence neither good nor bad, rather than a hazardous transition to some afterlife. As the Epicurean poet Lucretius puts it, the terrifying darkness that envelops our mind will be dispelled not by the rays of the sun, but only by a systematic account of the principles of nature (Lucr. 1.146–8).

Epicurean physics draws its inspiration from the atomism of the pre-Socratic Democritus. With typical lack of charity, Cicero claims that Epicurus copied almost all of his principles from Democritus, and wherever he deviated from Democritus, his changes were for the worse (Cic. *Nat. D.* 1.73, 1.69–70). This assessment is unfair. Epicurus appropriates Democritus' doctrine that the world is fundamentally composed of uncuttable bodies—atoms—flying through void, with all else being the result of purposeless atomic interactions. But Epicurus has to refurbish the Democritean world view against the challenges of later thinkers like Plato and Aristotle. Plato argues (in the *Timaeus*) that the world is the product of a beneficent divine craftsman. He also asserts (for example, in the *Phaedo*) that a person is an immaterial soul temporarily housed in a body, which moves from body to body in a cycle of reincarnation. Aristotle argues that the functioning of organisms reveals that nature is purposive. All these errors must be rebutted.

Epicurus also works to overcome problems internal to Democritean atomism, chief among them fatalism and skepticism. Having every future occurrence settled by the past positions and motions of atoms (as Democritus does) would render us helpless, and

Epicurus denies the truth of determinism to save us from this fate. Democritus asserts that the senses systematically mislead us about what the world is like, reporting that objects have properties like heat and color, which aren't part of the furniture of the world. He concludes that attaining knowledge is difficult or impossible; Epicurus wishes to secure the reliability of the senses against such skeptical worries. The Epicureans regard epistemology—their own name for it is "canonic," from *kanōn*, or measuring-rod—as a branch of physics (Diog. Laert. 10.30), psychology in particular. It is the study of the perceptual and other psychic processes that put us in contact with the world and allows us to make accurate judgments regarding it.

Sources

Epicurus' physics are fully laid out in his *magnum opus*, *On Nature*. Unfortunately, it's almost entirely lost to us, save for some carbonized fragments unearthed from an Epicurean library that was buried in the eruption of Mount Vesuvius 79 AD, so we must look elsewhere for information. The philosophical biographer Diogenes Laertius includes three letters by Epicurus in his *Lives of the Philosophers*. The *Letter to Herodotus* (*Ep. Hdt.*) summarizes the basic principles of the physics, the *Letter to Pythocles* (*Ep. Pyth.*) explains celestial and meteorological phenomena, and the *Letter to Meneoceus* (*Ep. Men.*) summarizes the ethics. They are invaluable but leave much unsaid. Far more extensive is *De Rerum Natura* (*On the Nature of Things*), a fervent six-book exposition of the Epicurean world-view in poetry by Lucretius (c. 94–55 BC). Another major source is the Roman statesman and philosophical enthusiast Cicero (106–43 BC), but he is deeply hostile to Epicureanism and must be handled with care.

From these sources and others we can usually glean a reasonably clear view of Epicurean physics, although many of the details are missing. And some major substantive questions are still unsettled, as we will see when looking at Epicurus' view on the gods, which he insists exist despite having no impact on the world. Our examination of Epicurean positive theology will close the chapter and illustrate the challenges of piecing together Epicurean doctrine from scattered and sometimes hostile reports.

Atoms and void

Central to Epicurean physics is a simple observation: there are bodies in motion. As empiricists, the Epicureans hold that all knowledge is ultimately grounded in sense-experience. Especially key are observations of what is *enargēs*, evident or obvious, such as the phenomenon of bodily motion. This observation is uncontested by anything else that is evident, and so we should accept it as true (Sext. Emp. *Math.* 7.211–216).

Our knowledge, however, is not limited to what is evident. On its basis, we can make inferences about what is hidden from direct observation, the *adēlon*. The Epicureans assert that the existence of void—where void is simply empty space—is a necessary condition for bodily motion. And since bodies do move, there is void. If space were a plenum, absolutely full of body, every body would be totally hemmed in by other bodies, and with nowhere for bodies to move into, they would not move at all (*Ep. Hdt.* 40, Lucr. 1.329–45).

The thesis that void is necessary for motion goes back at least to the Eleatic philosopher Melissus, who uses it to argue *against* the existence of motion rather than *for* the existence of void: although void is necessary for motion, void, as nothingness, is "what is

not," and what is not does not exist (Simpl. *in Phys*. 112.6 [DK 30 B7]). The originators of atomism, Leucippus and Democritus, strive to reverse this inference by establishing that "what is not" exists no less than "what is" (Arist. *Metaph*. A.4, 985b4 [DK 67 A4]). Epicurus appropriates their argument for the existence of void from the existence of motion, although we have little evidence that he feels the need to establish the conceptual coherence of the existence of void. Sedley (1982) argues for a further difference: for Democritus, void is *emptiness*, a privative stuff that could move about, whereas for Epicurus void is simply unoccupied space.

The other basic constituents of the world, besides void, are atoms—literally "uncuttables," from the alpha privative + *tomos*, "cut" or "split." The division of compound bodies occurs when their constituent bodies are forced apart by blows. But once we get down to a noncompound body (for example, a perfectly cubical atom) that contains no void space, blows would not cause subparts to fly apart, but simply move the body as a whole (Lucr. 1.526–39). Furthermore, the existence of an enduring set of atomic constituents is needed to explain observed regularities at the macroscopic level (Lucr. 1.584–98), and if the process of division were able to go on indefinitely, over time all of these bodies would (supposedly) be reduced to nothingness (*Ep. Hdt*. 41, Lucr. 1.540–47). Although *physically* indivisible, atoms are *theoretically* divisible, as they have spatial sub-parts; for example, a cubical atom has top and bottom halves. However, space itself is quantized into smallest spatial units. All magnitudes are "composed" of a finite number of these spatial minima. The Epicureans postulate minima primarily in order to solve Zeno of Elea's paradoxes against the existence of motion, which depend upon the infinite divisibility of space (*Ep. Hdt*. 57, Lucr. 1.599–634). (See "Indivisible Magnitudes" in Furley 1967 on this Epicurean innovation.)

Following Democritus, Epicurus assigns to the atoms a limited stock of properties, mostly those constitutive of being a body: size, shape, and "resistance of blows," that is, that atoms don't allow other bodies to pass through them when struck but get in the way, as opposed to void, which is "yielding." The Epicureans exclude from the atomic level what would later be dubbed "secondary qualities," such as colors and smells (Lucr. 2.730–1022), although unlike Democritus they include such properties at the macroscopic level.

Epicurus introduces two major modifications to Democritus in his explanations for atomic motion. For Democritus, atoms eternally fly through the void in all directions. They collide with and rebound from one another, and all atomic motion is the result of past motions and collisions. Aristotle complains that Democritus has no explanation for why the atoms move at all, rather than eternally sitting still, since they have no natural motion (*Metaph*. Λ.6, 1071b31–4; *Ph*. 8.1, 252a32–b2). In this way, Democritean atoms contrast with Aristotle's elements, which have a natural motion: either toward the center of the cosmos (weight, possessed by earth and water), away from the center of the cosmos (lightness, possessed by air and fire), or around the center of the cosmos (possessed by aether, which constitutes the stars and other heavenly bodies). The Epicureans posit that atoms have weight, a natural downward motion (Lucr. 2.184–215)—not toward the center of the universe, as no such center exists within a spatially infinite universe (see Lucr. 1.958–83), but simply the direction from our head to our feet. But this raises a difficulty: if unimpeded atoms move naturally down at equal speeds (as the Epicureans also hold), they would never collide with one another to produce macroscopic bodies, as they evidently have, but instead eternally fall downwards in parallel paths like drops of rain through the void (Lucr. 2.221–4). To remain

consistent with what is evident, the Epicureans introduce a second natural atomic motion, an occasional, random sideways "swerve" that explains why they collide with one another. (Chapters 2 and 3 of Englert 1987 discuss the details of how the swerve is supposed to operate physically.)

Cosmology

The Epicureans accept Parmenides' dictum that nothing comes to be from what is not (*Ep. Hdt.* 38) and its corollary that nothing perishes into nothing (*Ep. Hdt.* 39, Lucr. 1.215–64). Their atomism satisfies these constraints because there are three things that have not come into being but have existed and will exist eternally: the atoms, the empty space through which they move, and the universe, which is the totality of atoms and void. Everything else that exists comes to be from the atoms interacting with one another, and nothing perishes into nothing *simpliciter*, as atoms composing larger bodies survive their disintegration. Our own *cosmos*, the ordered world-system of earth, sun, planets, and other celestial bodies around us, has not existed for ever, but has come into being and will eventually disintegrate (*Ep. Hdt.* 73, Lucr. 5.351–63). With an infinite number of atoms moving through limitless void during an infinite stretch of time, there are an infinite number of world-systems (*Ep. Hdt.* 45), and life will exist on some of these other worlds, including intelligent life (Lucr. 2.1048–1104). (Furley (1981) explores the philosophical motivations of the atomist theory of an "infinite universe.")

The Epicureans account for the formation of our cosmos in exclusively non-purposive terms. A *cosmos* forms when matter happens to be greatly concentrated in one region of space. The *cosmos* starts as a turbulent mass, with earth, water, air, and fiery aether all mixed together. But over time they begin to separate out, with like element uniting with like, as particles of earth settle towards the middle of the *cosmos*, squeezing out other elements. So eventually we get layers of earth, water, air, and aether (Lucr. 5.416–508). The Epicureans give similar non-purposive explanations of celestial and meteorological phenomena: for example, lightning occurs when clouds collide and strike out numerous seeds of fire, analogous to how two stones or a stone and a chunk of iron strike one another and make sparks (Lucr. 6.160–218).

Being able to explain natural phenomena in such terms provides the key practical benefit of natural science, which is excluding explanations that appeal to the divine, since superstitious beliefs regarding the gods are a primary cause of human misery. As Lucretius puts it, human life was groveling in the dust, crushed beneath the weight of superstition, until Epicurus discovered the truth about what could be and what could not, and with this knowledge cast down and trampled superstition underfoot and raised us to the heavens in victory (Lucr. 1.62–79).

The Epicureans also give positive arguments against assigning to the gods responsibility for natural occurrences. They are the first philosophers we know of to have raised the Problem of Evil against the existence of (a certain sort of) God. According to the early Christian writer Lactantius, the Epicureans lay out four possibilities. Either God (i) wishes to eliminate evil but cannot, or (ii) can eliminate evil but does not wish it, or (iii) neither can nor wishes to prevent evil, or (iv) both can and wishes to prevent evil. But on (i) God is weak, on (ii) God is spiteful and on (iii) God is both weak and spiteful. So the only option left that is fitting for God is (iv), but this is inconsistent with the

existence of evil, since, if God both wishes to and can eliminate evil, there would be no evil (Lactant. *De Ira Dei* 13.20–22).

Lactantius' report shows why we need to be cautious with later sources on Epicureanism (and other ancient philosophers), as they often use the ancient material for their own purposes rather than giving scrupulously accurate depictions of their sources. As a Christian, Lactantius is concerned with defending the existence of an all-powerful and beneficent God, and so he naturally frames Epicurus' arguments as directed against such a god, and as presupposing that any being worthy of the appellation God would possess perfections like power and goodness to their maximal possible degree. But predecessors and contemporaries of Epicurus who had proposed that a beneficent deity created the *cosmos* (such as Plato and the Stoics) did not view god as omnipotent, but simply as extremely powerful and skillful, yet still needing to work within the limitations posed by matter. For instance, the Stoics claim that the relative thinness and fragility of the skull is a foreseen but unintended concomitant of god's beneficent plan, as he could not make it thicker without compromising our rationality (Gell. *NA* 7.1.1–13), a problem that would not concern an omnipotent deity limited only by what is metaphysically possible. Likewise, the Epicureans would not accept that an inability to alleviate our suffering is inconsistent with divinity.

Still, even though an omnipotent, omniscient, and all-good god creating the world *ex nihilo* is not their particular target, the argument's basic form is the same as in the classic Problem of Evil, although aimed at the wider class of powerful, wise, and caring craftsmen deities. The world is far too flawed to have been devised by them for our benefit (Lucr. 5.195–9), as shown by diseases, droughts, predators, and the other problems that confront us. Besides such beneficent craftsmen gods, the Epicureans also wish to banish the capricious Olympian gods. They do so by asserting that having non-purposive explanations for phenomena like thunderbolts renders otiose appeals to things like Zeus' anger. They also note that the distribution of thunderbolts—randomly striking unpopulated deserts and the sea, believers and non-believers in the gods, and the gods' own temples—appears to fit no plan at all. (Lucr. 6.379–422).

As noted, having non-purposive explanations of natural phenomena is valuable only instrumentally, for the sake of dispelling the fear of meddling gods. Thus, although in many cases we will be unable to know the exact explanation for some celestial phenomenon, that's perfectly satisfactory. The arguments for the atomistic world-view and against divine influence on the world are supposed to be rock-solid, and having this knowledge is crucial for attaining a blessed life (*Ep. Hdt.* 76–8). Once this is secured, however, knowing the precise cause of some particular natural phenomenon isn't important, so long as we have available some plausible explanation (or explanations) that lets us remain confident that it does have an atomic cause. According to the Epicurean doctrine of multiple explanations, in cases where we cannot infer the correct explanation for some phenomenon, we should just list the possible causes and remain content with that: in fact, trying to find out which explanation is the actual one would be pointless (*Ep. Hdt.* 79–80; *Ep. Pyth.* 85–8). The *Letter to Pythocles* remains true to this program, going through a large list of phenomena such as eclipses and giving disjunctive listings of their possible explanations, while warning that anybody insisting on accepting one theory while others are equally consistent with the phenomena has blundered from physics into mythology (*Ep. Pyth.* 87). (For more on the theory of multiple explanations plus the rest of Epicurean epistemology, see Asmis 1984.)

Biology

The Epicureans need to fit organisms and their functioning into their anti-teleological world view. The apparently skillful adaptation of organs to serve their functions has long served as the basis for arguing that that they are the product of a beneficent divine craftsman, from Paley's analogizing the eye to a watch back to Socrates' observation that the gods kindly placed the anus far from the nose (Xen. *Mem.* 1.4.2–7). Aristotle does not believe in a craftsman god, but he accepts that organs are functional items whose purpose is part of their nature: to view the heart merely as a beating, muscly thing in the chest is inadequate, as the heart is made of muscle (rather than bone) and is located in the chest (rather than the ankle) in order for it to do its job of pumping blood and thereby keeping the organism alive. In this way, organs are analogous to artifacts.

The Epicureans reject this analogy: an artifact is created with a purpose in mind, and so we can genuinely explain its form by reference to its function. But organs merely happen to be useful to serve certain ends, which is far different from having that end as their purpose (Lucr. 4.823–57). Generally speaking, in order for something to exist for the sake of a goal, it must be the result of an agent's intention (Simpl. *in Phys.* 372.9–20). So the Epicureans reject the possibility of Aristotelian intrinsic teleology, and as they also believe no craftsman god exists, they conclude that organs and organisms have no purpose.

The Epicureans, however, still need to explain the apparent design in nature: that the heart is in the chest seems to be no coincidence. They do so by propounding a theory of natural selection, which was first put forward by the pre-Socratic Empedocles. In the past, a much wider variety of organisms existed, but many were not fit to survive and reproduce. Some were utterly unsuitable to live, lacking feet or reproductive organs, while some were driven to extinction by competition with other animals (Lucr. 5.837–77). The survival of creatures well-adapted to live and reproduce was the product, but not the purpose, of this process.

Unlike in Darwin's theory, there is no evolution of new species from old ones. Instead, all of the species currently existing, plus countless more, were vomited forth from "wombs" attached to the earth when it was in a fertile period, far hotter and moister than now (Lucr. 5.772–825). This story seems incredible, but the Epicureans (like many others of the time) believe in spontaneous generation; Lucretius appeals to the (supposed) generation of new creatures such as worms even now in muddy areas to render plausible the generation of more complicated creatures during the earth's fertile period. (Campbell 2003 is a detailed commentary on the sections of *De rerum natura* dealing with the origins of species, society and language.)

Psychology

The Epicureans want to fit the mind and its operations within their materialistic worldview and to secure the thesis that death is annihilation, in order to relieve the fear of death. (Nothingness is neither good nor bad, and the future eternity of post-mortem non-existence will distress us no more than did our past eternity of prenatal non-existence.)

The Greek term *psychē* (and Latin terms *animus* and *anima*, both of which I am translating as "mind") can range considerably in meaning. The usual translation is "soul," and this translation fits well the way Plato uses the term in dialogues such as the *Phaedo*: the

psychē is the immaterial seat of our intellectual functions, which is temporarily trapped in our body but will survive death and move from body to body in a cycle of reincarnation. More broadly, the *psychē* can mean the "life-principle" (perhaps the "animator," noting the Latin word), the thing that causes living things to live and distinguishes them from non-living things: Aristotle uses the term this way when he speaks of plants having "souls" that organize their bodies to perform functions of nutrition and reproduction. For Epicurus, our *psychē* is what is responsible for sensation, thought, and memory, that is, close to our use of "mind."

Epicurus asserts that the mind is a bodily organ. He locates this organ in the chest (not the skull), as the chest is where Greeks commonly thought we feel emotions like fear, dread and joy (Lucr. 3.136–44). It is composed of four different sorts of particles: heat, air, wind and a nameless fourth element (Lucr. 3.231–57). The mind's ability to interact causally with the rest of the body proves that it is bodily. The mind moves the body, for example, when you decide to walk, and you walk, and the mind is moved by the body, for example, when a spear being thrust into your body causes pain (Lucr. 3.163–87). But only bodies can move and be moved by other bodies, so the mind is corporeal. Some suppose that the mind is incorporeal, but the only incorporeal thing is void, which neither *does* nor *undergoes* anything, but simply allows bodies to pass through it (*Ep. Hdt.* 67).

Lucretius catalogs particular ways in which the mind and body are closely interrelated both to underline that the mind is bodily and to press the point that the mind was born with the rest of the body and will die with it. The mind grows with the body, declines with the body, and is subject to diseases just as the body is (Lucr. 3.445– 525). We can now add to this catalog our understanding of how the physiological changes of diseases like Alzheimer's lead to profound changes in one's thinking and personality. All of this is precisely what we would expect if the mind is a bodily organ, and not at all how things should be if we have an immaterial "soul" somehow temporarily housed within but separate from our body.

Because the mind is a bodily organ, death is annihilation. The mind is a group of fine atoms trapped in the chest. On death, the "container" of the body cannot hold those atoms in as it did before, and the mind disintegrates, as the atoms constituting it escape into the surrounding air (Lucr. 3.425–44). An eye or nose detached from the body cannot sense anything, or even really exist as an eye or nose. Instead, they quickly decompose. Likewise, the mind can engage in "sensory motions" only when suitably confined in a living body (Lucr. 3.548–79). Nowadays, it would be widely accepted that, barring some miracle of God or cryogenic technology, death is annihilation if the mind is a bodily organ such as the brain. But the Stoics, for example, accept that the *psychē* is corporeal and that death is the separation of *psychē* and body, but hold that human *psychai* survive this separation though they are not immortal (Euseb. *Praep. evang.* 15.20.6). So Lucretius goes into great detail about the fineness of the particles that compose the mind and how it is physically impossible for them to hang together and retain their coherence as a living, thinking thing once released from the body.

Lucretius also argues that, even if the *animus* were somehow to survive death, that would not mean that *I* survive death, for I am a living animal, a union of *animus* and body, not an *animus* alone (Lucr. 3.843–6). And if somehow all the particles that make me up were to reassemble into "me," that wouldn't amount to my being reborn or surviving death. That's because in death the particles scatter widely, and there is a huge gap in time, so that when they reassemble, they create a new being—a duplicate of me,

not me—one with whom, moreover, I will have no links of memory or other consciousness (Lucr. 3.847–61). (An influential discussion of the supposedly therapeutic benefits of believing that death is annihilation, along with criticisms of it, is Nagel (1979).)

Sensation and knowledge

Objects throw off a continuous flow of "images" (*eidōla*) from their surfaces, and visual sensations result from those images entering our eyes. Other sensations are also analyzed as the effects of atomic interactions between objects and our sense-organs; for example, bitter tastes result from barbed atoms tearing at our tongue, whereas sweet tastes result from large, smooth atoms caressing our tongue (Lucr. 4.615–26). The Epicurean explanation of how sensations occur is largely the same as Democritus'.

Democritus derives skeptical implications from this explanation. He notes that the same sort of object can cause different sorts of sensations to different percipients, depending on their bodily state, position relative to the object, and the like. The same wine that tastes sweet to me may taste bitter to somebody with an illness, and a dog will not see objects as having the colors I do. From this, Democritus concludes that the wine is no more sweet than bitter, because in itself the object is neither (Sext. Emp. *Pyr.* 1.213), and that these sensible qualities are not part of the nature of the objects themselves, but merely affections of the sense-organs (Theophrastus *Sens.* 63–4). Sweetness, bitterness and color exist only "by convention," whereas in reality there are only atoms and the void, and because of this, we know nothing in reality. (Sext. Emp. *Math.* 7.135 [DK 68 B9]). (See O'Keefe 1997 for more on Democritus and Epicurus on sensible qualities.)

The Epicureans think such skepticism is untenable. Their main reason for rejecting skepticism is its disastrous practical consequences. Lucretius writes that if you lose confidence in your senses' trustworthiness, life would collapse, as you would have no reason to do things such as avoid cliffs and other hazards (Lucr. 4.500–10). After all, if the senses were unreliable, that it *looks as though* there is a cliff ahead would give no reason to believe that there *is* a cliff ahead. Furthermore, the skeptical position is self-refuting. If somebody thinks that nothing can be known, it follows from his position that he cannot know that nothing can be known. So there is no point in arguing with him (Lucr. 4.469–72; see Burnyeat (1978) for more on this anti-skeptical argument). Finally, the consistent skeptic could not even formulate his own thesis. In order to state "nothing can be known" and to give arguments to support his position, the skeptic will have to understand the meanings of terms such as "knowledge," "true," "false," and "doubtful" (Lucr. 4.473–7). So the act of stating the skeptical position demonstrates its falsity.

The Epicureans hold that, once the truth of one's sensations is cast into doubt, no criterion can be found whereby to distinguish the true from the false ones. We cannot use reason to determine which sensations are true and which false, as reason itself is a product of sensation (*Sent. Vat.* 23, Lucr. 4.480–85). So given that skepticism is untenable and that one cannot hold to the truth of just some sensations and avoid skepticism, the Epicureans heroically embrace the thesis that all sensations are true (*alētheis*): not just my sensation of the wine's sweetness and the ill fellow's sensation of its bitterness, but even the figments of dreamers and madmen (Diog. Laert. 10.32). To make this apparently lunatic thesis plausible, the Epicureans sharply distinguish between the sensations themselves, which are "non-rational" (*alogos*), and the judgments about the world that we make on their basis. It is only at the latter stage that error enters in (*Ep. Hdt.* 50). When we see a "bent" oar in the water, the sensation does not tell us *that* the oar itself

is bent. The bent-shaped patch in our visual field is just the impression we are receiving from the oar, and *we* make a mistake when we infer that the oar itself is bent. As Lucretius puts it, it is the mind's business to make such judgments (for example, about the oar's shape) on the basis of the information the senses furnish, and so we should not blame the eyes for the mind's shortcomings (Lucr. 4.379–86). Likewise, that this wine tastes sweet to me or warms me is true, but Epicurus says that it would be a mistake to think that wine generally has heating or cooling properties. Instead, it has a mixture of powers, such that a certain quantity of it would be heating for certain individuals with a certain bodily condition and cooling for others under different circumstances. And he says that the same sort of thing applies to colors, which are produced by the ordering and positioning of the atoms in relation to our sight (Plut. *Adv. Col.* 1109E–1110D).

If sensations themselves do not say *that* the objects in the environment are this way or that, however, in what sense they are all "true" becomes obscure. And indeed, the Greek term in the Epicurean thesis, *alēthēs*, can mean either "true" or "real," and some of the proofs that the Epicureans give of it comport better with "real" than "true." For example, they prove that all sensations are *alētheis* because they cause movement, whereas what does not exist moves nothing (Diog. Laert. 10.32). But the Epicureans cannot mean merely that sensations are *alētheis* in the sense that they exist, as this thesis would be beside the point in combatting skepticism. How precisely the Epicureans propose to thread this needle, so that their thesis is neither ludicrous nor unhelpful, is not entirely clear. (Striker 1996 and Taylor 1980 are good discussions of the issues involved.) But certainly central to their position is that sensations are effects of external causes, and as such, are *informative* about their causes, even if they don't themselves state *that* the world is this way or that. As Sextus Empiricus puts it, in reporting the Epicurean doctrine that every sensation is *alēthēs*, "every impression is the product of something existent and is *like the thing which moves the sense*" (*Math.* 7.63).

And so, the Epicureans assert that sensations are one of the criteria of truth. The second criterion is "preconception," or *prolēpsis*. Epicurus agrees with Socrates, in the *Meno*, that enquiry requires previous knowledge. I cannot ask "Is that thing over there a horse or a cow?" unless I already know what a horse and a cow are (Diog. Laert. 10.33). And requiring that all words be defined in terms of other words would engender an infinite regress. So we grasp the meanings of some words without need of additional proof (*Ep. Hdt.* 37–8). But this knowledge is itself grounded in sensation, as these basic ideas are formed via repeated sense-experiences of the same sort of thing, which gives us a memory of what has often appeared, the universal idea or preconception (Diog. Laert. 10.33).

Feelings of pleasure and pain are the criteria of choice and avoidance (Diog. Laert. 10.34). The goodness of pleasure and the badness of pain are obvious in our experience of them, analogous to how the heat of fire is obvious in our experience of it, and to establish that pleasure is good and pain bad we need only remember what each is like (Cic. *Fin.* 1.30). (For more on how Epicurean ethics is founded on our experience, see Sedley 1998.)

Freedom

As noted above, the Epicureans posit a random swerving atomic motion to account for atomic collisions and the formation of compound bodies. A second role for the swerve is to save us from "the decrees of fate," as Lucretius puts it. Unfortunately, how it is supposed to do so is unclear, in large part because the swerve is mentioned nowhere in

Epicurus' extant texts, and the later texts we possess don't describe the swerve's precise role. Nothing resembling a consensus or even a mainstream position has emerged in the scholarly literature.

Lucretius presents the most extended consideration we have by an Epicurean of the swerve and freedom (Lucr. 2.251–93). Lucretius writes that an occasional random atomic swerve initiates new motion, which prevents the existence of an endless chain of atomic causation, of new motion unalterably arising out of old. This swerve annuls the decrees the fate and allows us to have *libera voluntas*, most commonly translated as "free will." Lucretius draws an analogy between atomic swerves and our actions: just as the atoms can initiate new motion by swerving, so too we can swerve off our course at no fixed time or place, wherever we wish. A natural way to read this analogy is that our actions are like atomic swerves in this way because, at the atomic level of our minds, our free decisions just *are* constituted by atomic swerves, and these swerves initiate our actions.

How would this help preserve our freedom? Contemporary discussions of free will and determinism often focus on the so-called "Principle of Alternate Possibilities" (PAP), which is that in order for a person to be morally responsible for an action, she must have had the ability to do otherwise than she did. If the Epicureans accept PAP and think that determinism is incompatible with PAP, having our decisions constituted by random swerves would allow them to accommodate PAP within their atomism. These random swerves didn't have to occur when they did, and if they had not, our decisions and actions would have been different than they in fact were.

This interpretation is popular (see Purinton (1999) for a representative statement of it). But it faces problems. A random atomic swerving in one's mind is an unpromising basis for the production of free and responsible actions, instead of random and blameless twitches. It would sever actions from the beliefs, desires, and deliberations that prompt them and undercut our control over our actions. Furthermore, Lucretius' description of *libera voluntas* does not square with the idea that he is concerned with preserving humans' ability to do otherwise as a necessary condition on moral responsibility. Instead, *libera voluntas* is possessed by creatures throughout the earth, both human and non-human, and allows them to do what they want and to advance wherever pleasure leads them. To establish that *libera voluntas* exists, Lucretius gives examples of the body following the mind's desire, such as racehorses wishing to burst from a starting-gate and a person striving to push back against a jostling crowd. The ability to act as you wish in order to get what you desire is quite different from the ability to do otherwise than one does, and not having this ability would render one *helpless*, rather than simply morally blameless.

Cicero's *De Fato* explains why Epicurus would regard determinism as rendering us helpless in this way. According to the so-called "lazy (*argos*) argument," if what will occur in the future has been settled for all eternity—for example, it is now true and has always been true that I will recover from a disease, or it is now false and has always been false that I will recover—there is not any point now in deliberating and acting in a way such as *to make it the case* one way or the other. Whether or not I will recover has already been settled. Epicurus rejects this conclusion and asserts that such statements are at present neither true nor false. The outcome is not yet settled, and it is up to us which becomes the case. But Epicurus thinks there must be a physical mechanism in order for outcomes not to be predetermined in this way, and the swerve allows the future to remain open. (See O'Keefe 2005 for further elaboration and defense of this view, as well as for other interpretations not presented within this brief overview.)

The gods

As we saw above, the Epicureans unequivocally maintain that the gods have no role at all in the workings of world, which are explicable entirely in terms of the purposeless interactions of atoms in the void. Nonetheless, they insist that there are gods. In fact, Epicurus says that the gods' existence is obvious—*enargēs*, the same word he uses for phenomena like bodily motion and effective animal action. But the beliefs of most people regarding the gods are impious. Our preconception of a god is of a blessed and immortal being (*Ep. Men.* 123–4; Cic. *Nat. D.* 1.45). Most people have beliefs about the gods that conflict with this basic grasp of their nature—for instance, they conceive of the gods as feeling anger or gratitude, and as giving trouble to others. These are signs of weakness inconsistent with blessedness (*Sent. Vat.* 1). And administering the cosmos, which the Stoics think god does, would be high-stress, hard work (Cic. *Nat. D.* 1.52).

Instead, the gods live perfectly untroubled lives. As exalted beings, the gods should be most beautiful, and hence they will be human in shape, as no creature can be more beautiful than human kind (Cic. *Nat. D.* 1.47–8). As for their abodes, they live in perfect peace, far removed from our world (Lucr. 2.646–51), in calm, radiant realms with no storms, frosty snow or other disturbances (Lucr. 3.18–22).

What are we to make of all this? Our evidence is muddled. One option is to take the gods as literal biological beings, like you and me, but immortal. (This is usually dubbed the "realist" view, as on it the gods have a mind-independent existence; see Konstan 2011 for a recent defense.) And because the gods have no impact on our world, and are supposed to live untroubled lives far from us, their abode is in the *intermundia*, the space between the world-systems. (Some Epicureans apparently espoused this: see Cic. *Nat. D.* 1.18 and—perhaps—Lucr. 5.146–55, though Konstan opts for a realist view without intermundial existence.) This rarefied realm also would also supposedly help explain how the gods can live eternally, escaping the buffeting troubles that eventually will cause you and me to fall apart and cease to exist.

How would we come to know so clearly that such immortal extraterrestrials exist? Many sources confirm that we view the gods not with our sense-organs, but with the intellect (Cic. *Nat. D.* 1.49; Lucr. 5.146–55). Some of our preconceptions arise directly from sensing examples of the item in question; for example the concept of "cow" arises from seeing Bessie, Daisy, Clover and so on. But not all of our ideas are like this, and these include some preconceptions, such as "truth" and "usefulness." "God" is in this latter category. Lucretius reports (Lucr. 5.1161–1182) that we derived our idea of the gods from seeing in our imagination, and especially in our dreams, humans who are splendid, strong, and blessed. The Epicureans have the unfortunate theory (Lucr. 4. 722–822) that imagination and dreaming are a matter of the mind "tuning in," like a radio or television, to some of the fine *eidōla* that are constantly impinging directly on the mind, bypassing the senses. On the realist view, although we cannot sense with our eyes the gods who live between the worlds, their fine images still manage to travel to us from their abodes and impinge directly on our minds, from which arises our preconception of them.

Although probably the majority view among scholars today, the "realist" interpretation faces formidable difficulties beyond its apparent strangeness. Most seriously, the Epicureans hold that *all* compound bodies eventually cease to exist, since they have void spaces that allow their constituents to be forced apart (Lucr. 1.526–39). Only three things can exist eternally: (i) impenetrable elements that can repel blows, that is, individual atoms; (ii) things that are immune to blows, that is, void, which simply

allows objects through it; and (iii) things that have no surrounding empty space into which their constituents may disperse, that is, the universe considered as a whole (Lucr. 3.806–18). Putting the gods in a relatively tranquil area like the *intermundia* or saying that they're made of especially fine atoms that ordinary atoms somehow cannot touch and disrupt (as does Konstan 2011: 57–8) doesn't suffice to overcome this difficulty. Furthermore, the existence of organisms existing eternally contradicts Lucretius' account of biological development, on which fully grown creatures come to be as the result of a process of biological development in which "seeds" unfold within the womb (Lucr. 5.877–924).

A second interpretation seeks to avoid these problems. It starts from Lucretius' claim that we get our idea of the gods from dreams of splendid and blessed humans. Sextus Empiricus (*Math*. 9.43–7) states the theory in more detail. We begin with dream impressions of happy people and get from this idea to the idea of "god" by analogy to how we get the idea of "Cyclops." Both processes involve "transition." In the case of a Cyclops we start with the idea of a human being, enlarge him, and subtract an eye. For the gods, we start with the idea of a happy and long-lived human being, then intensify and make perfect his happiness, and extend his lifespan endlessly. In the case of gods, however, this process of concept-formation occurs naturally and automatically, among all people. On the second interpretation, Epicurean gods just *are* such idealizations of the most blessed human life. (This is usually dubbed the "idealist" view, as on it the gods exist as thought-constructs; see Sedley 2011 for a recent defense and Long and Sedley 1987 section 23 for an influential exposition.)

A vexed passage from Cicero's *On the nature of the gods* supports the idealist interpretation:

> [I]t must be admitted that the gods are of human appearance. However, that appearance is not body but quasi-body, and it does not have blood but quasi-blood. (Although these discoveries of Epicurus' are too acute, and his words too subtle, to be appreciated by just anyone, I am relying on your powers of understanding and expounding them more briefly than my case requires.) Epicurus … teaches that the force and nature of the gods is of such a kind that it is, primarily, viewed not by sensation but by the mind, possessing neither the kind of solidity nor the numerical distinctness of those things which because of their concreteness he calls *stremnia*; but that we apprehend images by their similarity and by a process of transition, since an endless series of extremely similar images arises from the countless atoms and flows to the gods [*ad deos adfluat*] and that our mind, by focusing intently on those images with the greatest feelings of pleasure, gains understanding of what a blessed and everlasting nature is.
>
> (Cic. *Nat. D.* 1.48–49, trans. from Long and Sedley 1987 vol. 1 23E)

As noted above, Cicero is deeply hostile to Epicureanism, so he can often be uncharitable in his interpretation and criticisms. Nonetheless, in this case his report can be trusted. Cicero wrote his philosophical dialogues in order to bequeath to his countrymen in Latin the arguments of prominent philosophical schools (the Epicureans, Stoics, and skeptical academy) on topics such as fate, ethics, and the gods, and he customarily used the handbooks of the various schools themselves in presenting their views, lightly clothing them in the dialogue format and improving their style (Cic. *Fin*. 1.1–13,

Att. 12.52). It is evident that Cicero was doing that here: he faithfully reports that the gods have only "quasi-body" and "quasi-blood," but has his Epicurean spokesman Velleius admit that he isn't expounding the doctrine clearly, reflecting Cicero's own incomprehension: later in the dialogue, he has the Academic spokesman Cotta attack the doctrine as not merely obscure but as nonsensical flimflam (Cic. *Nat. D.* 1.74–75).

If the gods are just idealizations of the most blessed life for us, however, the obscure doctrine makes sense as an answer to the question of whether the gods have bodies. To say that they do in the same way as we do would be mistaken—as Velleius later says, the gods don't have the same sort of solidity or numerical distinction as concrete bodies like you and me. But to say that they're bodiless would be misleading, suggesting that the gods are incorporeal disembodied intelligences, such as Plato's Craftsman in the *Timaeus*. As idealizations of the best human life, our idea of the gods is an idea *of* a being with a body, blood, and human appearance. And if the gods are ideas, this would also make sense of the reports that the gods' substance is tenuous, since, according to the Epicureans, our minds (and our ideas) are both atomic, but neither is solid: the mind is a fine-structured and flimsy body diffused throughout the rest of the body, and both images and ideas are delicate (*Ep. Hdt.* 63, Lucr. 4.745–56). Finally, Cicero's report of how we form our idea of the gods via "transition" from images of blessed people has these images flowing *to* the gods. Usually this is thought to be a scribal error and is emended, for example, so that the images flow *from* the gods (*a deis*), but on the idealist view the received text may well be right, as the gods simply are the idea of human blessedness we form from such images.

The aftermath

With the rise of Christianity, the Epicurean world-view went into decline, with Plato and later Aristotle providing philosophical inspiration for those thinkers who wanted to draw from the wisdom of the ancients. By late in the middle ages, a broadly Aristotelian physics was ascendant. But Lucretius' *De Rerum Natura* was rediscovered in the Renaissance, and Epicurean physics helped shape the scientific revolution. (See Greenblatt 2011 for a polemical recounting of the rediscovery of Lucretius and its impact, and Wilson 2009 for a brief overview of Epicureanism in modern philosophy.) Although they were careful to restrict their Epicureanism to the natural world, exempting God and the soul from its purview, thinkers such as Pierre Gassendi (1592–1655 AD) and Robert Boyle (1627–91 AD) formulated versions of atomism explicitly based on Epicureanism, and even a non-atomist like René Descartes had a broadly Epicurean view of the natural world, whose processes occur because of the mechanical interactions of bits of extended stuff, with no recourse to purposes in nature or to irreducible powers.

References and further reading

As noted above, the primary sources on Epicureanism are widely scattered. *The Epicurus Reader* (eds. and trans. B. Inwood and L. Gerson, Hackett 1994) cheaply gathers together the most important texts, and *The Hellenistic Philosophers vol. 1* (eds. and trans. A. Long and D. Sedley, Cambridge University Press 1987) does so more expensively but with useful commentary. There are a large number of fine translations of Lucretius; one is A. Stallings' *The Nature of Things* (Penguin 2007).

Asmis, E. (1984) *Epicurus' Scientific Method*, Ithaca, NY: Cornell University Press.

Burnyeat, M. (1978) "The Upside-down Back-to-front Sceptic of Lucretius IV 472," *Philologus* 122: 197–206.

Campbell, G. (2003) *Lucretius on Creation and Evolution*, Oxford: Oxford University Press.
Englert, W. (1987) *Epicurus on the Swerve and Voluntary Action*, Atlanta: Scholar's Press.
Greenblatt, S. (2011) *The Swerve: How the World Became Modern*, New York: W. W. Norton & Company.
Fish, J., and Sanders, K. (eds.) (2011) *Epicurus and the Epicurean Tradition*, Cambridge: Cambridge University Press.
Furley, D. (1967) *Two Studies in the Greek Atomists*, Princeton, NJ: Princeton University Press.
Furley, D. (1981) "The Greek Theory of the Infinite Universe," *Journal of the History of Ideas* 42: 571–85.
Konstan, D. (2011) "Epicurus on the Gods," in J. Fish and K. Sanders (eds.) *Epicurus and the Epicurean Tradition*, Cambridge: Cambridge University Press: 53–71.
Long, A. and Sedley, D. (1987) *The Hellenistic Philosophers*, 2 vols, Cambridge: Cambridge University Press.
Nagel, T. (1979) "Death," in his *Mortal Questions*, Cambridge: Cambridge University Press: 1–10. Originally published in *Nous* 4 (1970): 73–80.
O'Keefe, T. (1997) "The Ontological Status of Sensible Qualities for Democritus and Epicurus," *Ancient Philosophy* 17: 119–34.
O'Keefe, T. (2005) *Epicurus on Freedom*, Cambridge: Cambridge University Press.
Purinton, J. (1999) "Epicurus on 'Free Volition' and the Atomic Swerve," *Phronesis* 44: 253–99.
Sedley, D. (1982) "Two Conceptions of Vacuum," *Phronesis* 27: 175–93.
Sedley, D. (1998) "The Inferential Foundations of Epicurean Ethics," in S. Everson (ed.) *Ethics*, Cambridge: Cambridge University Press: 129–50.
Sedley, D. (2011) "Epicurus' Theological Innatism," in J. Fish and K. Sanders (eds.) *Epicurus and the Epicurean Tradition*, Cambridge: Cambridge University Press: 29–52.
Striker, G. (1996) "Epicurus on the Truth of Sense-impressions," in her *Essays on Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press: 77–91.
Taylor, C. (1980) "'All Perceptions Are True,'" in M. Schofield, M. F. Burnyeat and J. Barnes (eds.), *Doubt and Dogmatism: Studies in Hellenistic Epistemology and Ethics*, Oxford: Oxford University Press: 105–24.
Wilson, C. (2009) "Epicureanism in Early Modern Philosophy," in J. Warren (ed.) *The Cambridge Companion to Epicureanism*, Cambridge: Cambridge University Press: 266–286.

Related chapters

5. Leucippus and Democritus
16. Plato's cosmology
22. Aristotle's philosophy of nature
33. Epicurus' Garden: ethics and politics
34. The Hellenistic Academy

Portions of this chapter are abridged from my *Epicureanism*, Acumen/University of California Press, 2009.

33
EPICURUS' GARDEN: ETHICS AND POLITICS

Pierre-Marie Morel

The central question to which Hellenistic ethical systems offered a response was that of the goal of human life: What is the ultimate end, the *telos*, that we pursue—or ought to pursue—in order to attain what is truly good? The true, or sovereign, good is not only what is good *for oneself*—personal happiness—but also what is good *for others*. Following an already long-standing tradition that can be traced back at least to Plato, the idea that acting for another's good coincides with acting for one's own good, had attained an almost axiomatic status: there need be no contradiction between personal happiness and the good. Similarly, all our actions depend upon a fundamental desire for happiness or the good. Even if we often manage to perform actions that are contrary to the good, it is imagined that humans have a primary and natural desire for it.

As Aristotle noted already at the beginning of the *Nicomachean Ethics*, that does not mean that there is any general agreement about the definition of happiness itself. On the contrary, opinions on this matter diverge wildly, and not only opinions of the general populace but also of philosophers themselves. Cicero offers a comprehensive survey of philosophical theories of the good, inspired by the one drawn up by the Academic Carneades: the *divisio carneadea*, which consisted of an elaboration of all possible replies to the question of how to attain the final good (*Fin.* 5.16–23). In this way the adoption of one or other conception of the *telos* is a criterion for distinguishing between various opposing philosophical schools.

In this arrangement, the Epicureans occupy a unique and distinctive place: they hold that the final good and the *telos* of human life is pleasure. For Epicurus, the pleasure is "the starting-point (*archē*) and goal (*telos*) of the happy life" (*Ep. Men.* 128): it is the state that best fits our nature and it is because of pleasure (as the *archē*) and with pleasure in view (as the *telos*) that we engage in all our actions. Let us leave aside for now the reasons that led the Epicureans to take this position and the arguments that they thought supported its truth; let us also leave aside the Epicureans' contentious claim that the highest pleasure possible is simply the absence of pain (for discussion see Brunschwig 1986, Striker 1993, Sedley 1998, Erler and Schofield 1999, Woolf 2009). For now, let us notice only that if there is some final or sovereign good then it is intended to be identified as the state which best befits us. In this sense, pleasure is the *telos* and therefore Epicurean ethics is fundamentally hedonist. Does it mean that we get a positive pleasure when we reach this goal? It may be that Epicurean hedonism just consists in doing what is necessary to remain free from pain.

In Cicero's survey, Epicureanism is opposed to other views—notably Stoicism—according to which we should pursue virtue rather than pleasure. For the opponents of Epicureanism, the Epicureans break the traditional connection between the good for oneself and the good of others; their hedonism is nothing but a selfish conception of the best life that neglects the good of others. As a result, Epicureanism would be quite unable to support a serious moral outlook since it is incompatible with virtue. (Such a criticism can be found in Cicero, Plutarch, and the Stoics themselves. For Epictetus, Epicurus is simply mouthing obscenities (Diog. Laert. 10. 6).)

That is not to say, of course, that the Epicureans did indeed give up any attempt to ground some form of morality. They very much rejected the accusation that they had pulled apart what is good for oneself and the good of others and did not in fact defend a kind of amorality. Rather, they intended to promote a moral outlook that extends from the bonds we have with those close to us and our friends right up to relations of a political sort between citizens in a particular city. Nevertheless, the difficulty is evident: the main criterion, pleasure, is an affection private to the individual and each agent is told to regulate all his conduct in the pursuit of that affection, not generally—as in later utilitarian theories—but in the agent himself; but this rule is also supposed to recommend good actions that involve beneficial relations between the agents and others. The Epicureans therefore face the challenge of showing that pleasure is not merely an indication of personal satisfaction, but also a criterion for psychic excellence—the best state of the soul—and moral correctness. As we will see, pleasure not only determines a state of well-being; it is also a practical principle, because it leads to action.

Given that the disposition that demonstrates both psychic excellence and moral correctness is virtue (*aretē*), the problem they face is the problem of virtue: how the same action can be both pleasant and virtuous? We shall see them try to resolve this problem in various complementary ways: a pragmatic response that justifies virtue in terms of its utility; an etiological view that shows that it is an immediate *cause* of pleasure, so that virtue objectively coincides with the *telos*; and finally, through an original theory of society in which civic life and friendships are distinguished but thought not truly incompatible.

The problem of virtue

The formula that pleasure is the "starting-point and goal of the happy life" maintains not only that pleasure is the alpha and omega of happiness, but also that only pleasure is a true end. It maintains also that every activity, including other-regarding activity, should be regulated by pleasure. The text continues:

> We know that pleasure is a primary and natural good and from it we begin every choice and rejection and we turn to it as a measure to judge every good by its affection.
>
> (*Ep. Men.* 129)

Pleasure is natural (*suggenikon*), says Epicurus, because it necessarily accompanies our fundamental constitution; it is natural because it is appropriate to our nature. (Later in the same text he calls it "con-natural" (*sumphuton*).)

Some Epicureans saw a proof of this in the pursuit of pleasure and avoidance of pain among young animals and small infants in the cradle (Diog. Laert. 10. 137; Cic. *Fin.*

1. 30, 71; cf. Brunschwig 1986, Warren 2007). (On the general question of Epicurean naturalism see Morel 2009.) The precise force of the argument is debatable since the Epicureans do not make clear whether these observations show what an *adult* human does fundamentally and immediately tends towards or only what he ought to pursue as a result of various intellectual and psychological efforts in assimilating Epicurean doctrine. It is quite doubtful that an adult human is invited to return to a purely natural state like that embodied by the small infant. Instead, the "cradle argument" is likely designed to make a limited point and not offer the recipe for a general practical model; it shows a truth we need always to bear in mind, namely that pleasure is our primary relation with nature.

Pleasure takes the form of an affection, or *pathos*. From a psychological perspective, the *pathos* of pleasure is, basically, a natural state. Even though pain may be brought about by false beliefs (hence, by a properly human false reasoning), and pleasure by the correct use of our reason, one may say that, by itself, the *pathos* is natural insofar as it immediately reveals to the patient his real current state. In fact, pleasure and pain are natural and self-evident states that indicate immediately and without additional prompting what we ought to pursue and avoid. Also, from an epistemological perspective, affection in the form of pleasure or pain is criterial and veridical; together with perception and preconception they give us primary evidence about the world. In this way, the function of pleasure extends beyond the mere indication of internal satisfaction; it marks out everything that we should pursue or avoid, every choice or rejection. We should note that—as the following section of the *Letter* makes perfectly clear—this extends to include moral actions: pleasure is not merely what we desire because nature tells us to enjoy it, but it is also that by which we should regulate our actions. It is the "*archē*" not only in the sense of a "starting-point" but also in the sense of "principle" of action. And it is also, as a *telos*, not merely the goal that we might attain by whatever means possible, but also a practical limit—*telos* is often in Epicurus equivalent to *peras*, or limit—that may give positive guidance to our behavior. Pleasure functions both as a natural norm of satisfaction but also as a practical norm for behavior, a criterion for moral correctness in matters of choice.

We are presented, therefore, with a moral system—a collection of precepts for behavior that have either the goal of the good of others or is at least consistent with such a goal—that is founded nevertheless on a private affection that has personal satisfaction as its cause. Morality is subordinate to pleasure and other-regard is second to personal interest. Is this a tenable position? Can it offer a consistent ethical view? Further, we might ask what function the Epicureans can reserve for the virtues: are they simply means to attain the end, the *telos* that is pleasure? If so, then the virtues are not good *per se* since their value is dependent on the pleasure they can produce. In that case, for the Epicureans "we choose virtue for pleasure, not for itself, just as we choose medicine for health" (Diog. Laert. 10.138). The Stoic Cleanthes mocked the Epicurean virtues, representing them as submissive maid-servants kneeling before the throne of pleasure (Cic. *Fin*. 2.69). There are therefore two potential difficulties for the Epicureans: an instrumentalist view of virtue and an "egoist" conception of interpersonal relations that appears *prima facie* to exclude genuine altruism.

One particularly economical answer would be to interpret Epicureanism in a utilitarian spirit (following Guyau 1886, a supporter of Bentham and Mill who was also read by Nietzsche). If Epicureanism bases its ethics on a person's interests then it might without incoherence offer itself as a moral code which perhaps recommends altruism as a promotion of the collective interest. If pleasure as the goal of action is what is in a person's

interests, then we might assimilate Epicureanism to a form of utilitarianism. In this kind of utilitarianism, self-interest seems to be sufficient to define the ethical rules.

Is it, after all, certain that the pleasure that Epicurean hedonism recommends is always one's own? And is a relationship with someone else merely incidental to the pursuit of happiness? The Epicureans did reserve an important place for friendship (*philia*) in their picture of the good and happy life, so they did at least think that their ethics could accommodate other-concern and therefore a form of morality (see Mitsis 1988: 98–128, Konstan 1996, Brown 2002). We need to consider whether this friendship goes deeper than mere utility. What I shall call the "pragmatic solution," offers a different solution to the problem of the instrumentality of virtue by simply admitting the subordination of virtue to pleasure. Perhaps the friendship between wise men, in particular, is a means of restoring the good of others at the heart of the Epicurean view of happiness and the good and therefore resolving the initial difficulty.

The pragmatic solution

Let us first consider a pragmatic response to the problem of virtues. I shall pass over many of the familiar aspects of the traditional criticisms of Epicureanism, particularly those from the Stoics and those in the Platonist tradition such as Cicero and Plutarch, namely: Epicureans put pleasure ahead of virtue and recommend debauchery; they fail to recognize the authority of law; they undermine traditional religion. Let us remember that Epicurus himself, despite living a more or less austere life, did much to encourage the charge of immorality: for example, he declared that he "spat on the beautiful (*to kalon*—moral beauty, the fine) and those who gape at it without reason, when it produces no pleasure" (Ath. 547A) and he said that if a debauched life were to produce happiness that we would have no reason to criticize it (*RS* 10). No doubt these were in part deliberately provocative, but the problem still remains: how is it possible to recommend genuine virtue if it is merely instrumental to a higher and different end, namely pleasure?

The first and most obvious answer is pragmatic. In general terms, it denies that there is in principle an opposition between virtue and pleasure. Choosing to pursue some pleasure demands a prudent calculation of consequences and an anticipation and comparison of the pleasures and pains that will result. As Epicurus says in the *Letter to Menoeceus* 127, not every pleasure is to be chosen, although every pleasure is a good; pleasure is a general good but a given pleasure does not perform its role and has no value unless it plays an effective role in our overall happiness. A pleasure must be useful for us and must not have effects that would be damaging. If, for example, the pleasures of food keep me from philosophy, there is a good chance that they will cause pains and discomfort, of a mental kind at least. So I should avoid them.

Similarly, Epicurus prescribes a strict regulation of desires. He recommends that, among the desires, we privilege those that are both natural and necessary for happiness, amongst which will be desires that can best be satisfied by philosophy and friendship. These are distinct from those that are necessary for the absence of physical discomfort and other vital functions as well as those that are merely natural, such as sexual desire. Natural desires as a whole are distinct from "empty" or "groundless" desires such as the pursuit of honors or luxury (*Ep. Men.* 127).

Nevertheless, the Epicureans were hounded for helpful clarifications of just what they meant by "pleasure" (most evidently in the criticisms that Cicero aims at them

in *De Finibus*; see, for example, *Fin.* 2.6). Perhaps as a response to such demands they introduced a distinction between two types of pleasures: pleasures "in motion" and "stable" pleasures. Some texts label these, on the one hand, "kinetic" pleasures, such as the pleasure of drinking when thirsty or the joy and elation that make moments of fear or distress tolerable and, on the other hand, pleasures "in rest," "stable" or "katastematic" pleasures (for example, Diog. Laert. 10.136; Cic. *Fin.* 1.39). The latter, the absence of physical pain and psychic tranquility, are expressions of a stable state of our "constitution" (*katastēma*) and are not the experiences of the change from pain to its absence, a state of improvement or restitution. Rather, they are clearly distinguished from all pain, whether physical or mental.

The former, kinetic pleasures, still have a role in a good life, as Epicurus shows:

> For my part, I cannot conceive of the good if I take away the pleasures of tastes, of sex, sounds, and the pleasing movements that the vision of beautiful forms produces.
>
> (Epicurus cited by Ath. 546E; see also Diog. Laert. 10.6, Cic. *Tusc.* 3.41)

The austerity of certain Epicurean pronouncements and their suspicions about physical pleasures is heavily down-graded here. Epicurus sets himself against the emphatic moralizing and exhortation to virtue: "good" is a hollow term if it is used in a way that fails to respect the common experience of those things that contribute to well-being.

However, only katastematic pleasures are entirely free from all antecedent pain. So they appear to form the basis for the psychic tranquility that allows us to proceed calmly to weigh up pleasures and pains. We might also suppose that they are necessary for the proper use of kinetic pleasures. The fact that it is possible to attain a kind of equilibrium of pleasure shows that pleasure itself, far from encouraging limitless desires, sets a limit, a stable state that could only be identified as "happiness."

In any case, pleasure is a natural goal but also one that demands calculation. This is the "sober reasoning" that Epicurus recommends in the *Letter to Menoeceus* and which consists in the estimation—both empirical and rational—of the pleasures and pains likely to result from a given action (*Ep. Men.* 129–130). Now virtue itself plays a role in this calculation: practical wisdom or prudence (*phronēsis*) evaluates pleasure in terms of utility and interests, and these interests include the stability of relations with others. Pleasures that harm others bring social and ethical consequences that are detrimental to real and stable pleasure: condemnation, punishment, and personal disturbances (Cic. *Fin.* 1.50–51). It is not possible to disentangle pleasure from the prudence with which this practical calculation is performed and we should therefore say that pleasure cannot be dissociated from prudence itself, honesty, and justice (*Ep. Men.* 132, *RS* 5). Such a link is not accidental: "The virtues are naturally linked to the pleasant life and the pleasant life is inseparable from them" (*Ep. Men.* 132).

Such a pragmatic solution provoked the comparisons I mentioned above from the nineteenth century on between Epicureanism and utilitarianism. The good is what is in our interests; virtue is in our interests; so virtue cannot be disassociated from pleasure.

In general terms it would be absurd to repress pleasure in the name of virtue. Pleasure is the only state which is entirely natural to us and we ought of course to live in accordance with nature. Conversely, pleasure coincides with the absence of mental disturbance and only a virtuous and temperate life can maintain mental tranquility.

Pleasure and virtue are necessary for one another in the maintenance of the wise man's well-being.

In this sense, the Epicureans would not see any downgrading of virtue in the view that takes it as a means and, if we bear in mind the naturalist basis of Epicurean ethics, we will understand the idea of something's utility as being entirely positive. Justifying virtue by its utility—just as medicine is valuable only for the health it produces—appears at the outset of the exposition of Epicurean ethics given by Torquatus in Cicero's *De Finibus* (*Fin.* 1.42–54). This would be a problem if virtuous means had to be abandoned in the pursuit of a particular pleasure, but in reality, Epicurean *phronēsis* sets up not a simple relationship of means to ends but, as we have seen, a circular relationship between the pleasant life and the virtues with the two things being reciprocally sustaining. Note that Epicurus' *phronēsis* is not without parallels in Aristotle. In Aristotle, practical reasoning is a rational or intellectual virtue and, as seems also to be the case for Epicurus, it directs and unifies the other moral qualities. All the same, unlike Aristotelian *phronēsis*, the Epicurean version is not itself the rule or norm of reference, because it takes pleasure as the criterion for choice. Pleasure alone is the ultimate criterion.

The virtues are means to pleasure but these means must be used constantly in a life lived well and they are therefore able to fulfill an instrumental function while legitimately retaining a moral role. The "instrumental objection" therefore fails: the virtues are necessarily and legitimately means and not ends; for them to be ends themselves would abandon the axiom that only pleasure is choice worthy *per se*.

The etiological argument

It nevertheless appears that certain Epicureans sought to refine the doctrine on this precise issue. The Garden wanted to soften this hard-line instrumentalist view of virtue—that virtue is only a means to pleasure and therefore to happiness—with the assumption, shared by others, that only a virtuous life could be a good life. Let us call a "virtuous life" one which is lived genuinely virtuously, not in a way that merely *appears* virtuous, but also with authentically virtuous states of mind. The Epicureans certainly did not adopt the mode of political life attributed to Protagoras by Plato in the *Protagoras* (323b), which consisted not in being virtuous but merely seeming so.

The later Epicurean Diogenes of Oinoanda offers important clues to the general position of virtue in the good life. The two most important passages are fragments 32 and 33 of his inscription:

> I shall discuss folly shortly, the virtues and pleasure now. If, gentlemen, the point at issue between these people and us involved inquiry into "what is the means of happiness?" and they wanted to say "the virtues" (which would actually be true), it would be unnecessary to take any other step than to agree with them about this, without more ado. But since, as I say, the issue is not "what is the means of happiness?" but "what is happiness and what is the ultimate goal of our nature?," I say both now and always, shouting out loudly to all Greeks and non-Greeks, that pleasure is the end of the best mode of life, while the virtues, which are inopportunely messed about by these people (being transferred from the place of the means to that of the end), and in no way the end, but the means to the end.
>
> (32.I.3–III.8 Smith, trans. M. F. Smith)

> I want [now to get rid of] the error, [prevalent among] you along with [others, concerning] the same emotion and especially [to speak] against one doctrine of yours. My argument is [as follows: not] all causes in things precede their effects, even if the majority do, but some of them precede their effects, others [coincide with] them, and others follow them. Examples of causes that precede are cautery and surgery saving life: in these cases extreme pain must be borne, and it is after this that pleasure quickly follows. Examples of coincident causes are [solid] and liquid nourishment and, in addition to these [sexual acts]: we do not eat [food] and experience pleasure afterwards, nor do we drink [wine] and experience pleasure afterwards, nor do we emit semen and experience pleasure afterwards; rather the action brings about these pleasures for us immediately, [without awaiting] the future. [As for the causes that follow, an example is expecting to win] praise after death: although men experience pleasure now because there will be a favorable memory of them after they have gone, nevertheless, the cause of the pleasure occurs later. Now you, being unable to mark off these distinctions, and being unaware that the virtues have a place among the causes that coincide with their effects (for they are borne along with [pleasure] completely go astray).
>
> (33.V.2–VIII.14 Smith, trans. M. F. Smith)

The precise identity of the opponents envisaged here is debatable. But there are good reasons to think that Diogenes is addressing the Stoics. Against those who identify virtue and happiness or makes them equivalent, Diogenes characterizes virtue as a "producer" (*poiētikon*) of pleasure and therefore distinct from pleasure itself. They are three kinds of producers: those which antecede their effects (such as surgical intervention causing later pleasure), those simultaneous with their effects (such as certain intrinsically pleasant activities), and those that come after their effects in a kind of psychological anticipation (such as the funerary eulogies that please the still living). For its part, virtue is a producer whose effect is simultaneous and we are therefore wrong to think that virtue and pleasure can never co-exist. On this point, perhaps the Cyrenaics are also in Diogenes' sights because they wrongly take the opposing view (see Sedley 2002). Just as drinking or ejaculation bring immediate pleasure—while surgical procedures bring only deferred pleasure—virtue is one of those producers which, while distinct from their effects, are inseparable from them. Virtue produces pleasure immediately; it is therefore a means, but one which does not cease when the goal is attained.

The upshot is the reassertion of two propositions which the critics of Epicureanism hold to be incompatible: "virtue is a means to pleasure" and "virtue may accompany pleasure." This allows the rejection of the criticisms leveled against the pragmatic solution: against the argument from utility the Academics and Stoics might still object that the reduction of virtue to a means is tantamount to abolishing it altogether. For Cicero, for example, virtue and knowledge are by definition ends in themselves and can never be mere means (see *Fin*. 1.25). For Diogenes, the virtues, although they are not ends *per se*, are not in opposition to pleasure because, rather than preceding pleasures, virtues are co-extensive with them. This is another way of saying what Epicurus meant by: "The virtues are naturally tied to the pleasant life and the pleasant life is inseparable from them." The category of "producer," including three distinct forms of producers, allows Diogenes to reinforce this claim and show that it is defensible not only in pragmatic terms but also in terms of a general ethical and psychological etiology: if virtue brings

about pleasure immediately, pursuing pleasure, on the one hand, and aiming at a virtuous life, on the other, are not two distinct and separate tasks.

Society and friendship

All the same, neither of these arguments—the pragmatic solution and the etiological argument—offers a direct solution for the problem of egoism or, more precisely, the priority of personal interests over other-concern: if virtue is a means, are not other people also necessarily means to an individual's pleasure? And are the connections between people rather trivial if they are founded only on personal utility? This is not an anachronistic complaint. Aristotle in *Nicomachean Ethics* 8.3–5 distinguished between three forms of friendship: those based on virtue, pleasure, and utility. Only the first form involves wanting good for one's friend *per se* while the other two do so only incidentally (*kata sumbebēkos*). So the Epicureans cannot really ignore the problem. If friendship (*philia*) has as its primary aim the tranquility of the soul, that means that its final goal is personal happiness. But, we might object, if this promotes the good of the friend it will do so only incidentally. Epicurus himself highlights this difficulty when he declares that friendship is generated by need (*chreia*) and seeks after utility (*Sent. Vat.* 23, Diog. Laert. 10.120b). (Note also that the manuscript texts of *Sent. Vat. 23*: "All friendship is itself a virtue (*aretē*)" has been corrected by editors following Usener to give "All friendship is of itself choiceworthy (*hairetē*); on this see Brown 2002).

In Cicero's *De Finibus*, Torquatus defends the Epicurean view against the accusation that it makes true friendship impossible on the ground that it is incompatible with the pursuit of pleasure (*Fin.* 1.65–70). The challenge is to answer the Academic and Stoic objection, plausible as it is, that there is an opposition between the egoist pursuit of pleasure and the altruism essential to true friendship since it is easy to imagine that Epicurean friendship will be entirely subordinate and dependent upon the one true goal, namely pleasure. And we can imagine that the Epicureans, having asserted the instrumental nature of virtue, might have no qualms in making friendship and friends also mere means to happiness.

However, it is not clear that this is exactly the view they took. In the face of this difficulty the Epicureans instead emphasized a conception of human sociability that gave friendship an essential and entirely positive role in a good life, lived among friends in a communal retreat from public life (*RS* 7, *Sent. Vat.* 58; Lucr. 5. 1120–1135; on Epicurus' maxim "live unknown" see Roskam 2007). To understand the privileged status given to friendship by the Epicureans, it is necessary to begin by considering their conception of social and political life (cf. Brown 2009). Here again the Epicureans faced a problem: is a naturalistic foundation for justice between people possible in the same way that natural limits functioned as grounds for choosing pleasure as the principle and goal of a happy life? In other words, is there a natural foundation for politics detectable even in the Epicureans use of the "cradle argument" to open their ethics? In fact, although the natural norm of pleasure requires calculation and consideration as part of a rational negotiation of our human nature, the institution of lawfulness requires a complicated attitude that refers to nature only obliquely.

The definition of justice in Epicurus' *Principal Sayings* (*Kyriai Doxai* or, in Latin, *Ratae Sententiae*) 31–38 is particularly indicative of this. On one hand, Epicurus gives an apparently naturalistic definition of justice: "What is just by nature [*to tēs phuseōs dikaion*] is the sign of the utility served by neither doing to nor suffering wrong from

one another" (*RS* 31). On the other hand, he seems also to endorse a conventionalist or relativist view of the just and justice: justice does not exist *per se* but only as a kind of agreement (*sunthēkē*). It is an agreement made by people at a certain time and place based on what it is appropriate to do and not do given the circumstances and to avoid causing mutual harm (*RS* 33). The definition of justice will therefore vary according to time and society such that what is just at one time may not necessarily be so at another (*RS* 37–8). In fact, Epicurus' view is not a pure relativism since it rests on two constants: the correspondence between justice and utility (*to sumpheron*) and the fact that the sole criterion for political utility is what serves to preserve a given political community and a political point in its history. The common experience of what serves to benefit communal life allows us to give some content to a general preconception (*prolēpsis*) of what is just. And this is how natural facts about communal life—what benefits society—can be linked with a conventional institution of legal regulations. Nature is not sufficient on its own because what is just will itself vary; but nature sets out limits within which the definition of mutual utility can vary and leaves to us the responsibility to decide on laws. Interpretations that attribute to Epicurus a kind of juridical naturalism (for example, Alberti 1995) cannot avoid entirely the conventionalist view (broadly defended by Goldschmidt 1977). Without denying a link with nature, Epicurus did reject any conception of justice which abstracted it from differences between societies and historical developments (see Morel 2000).

We can see, therefore, various similarities and differences between political life and personal ethics. In both cases, what matters is the identification of what is in our interests through an appreciation—both empirical and rational—of advantages and drawbacks. In both cases, the connection with nature is both necessary and indirect. However, the organization of a society is never a goal in itself, a *telos* in the full sense of the term. We live in societies and legislate only in order to save ourselves from tyranny or other dangers linked to the *polis*. Epicureanism is in this sense not hostile to politics but the wise man nevertheless adopts something of a defensive attitude towards the city. Only personal ethics has in view a genuine goal, the true *telos*, namely happiness.

When we speak of "personal ethics" in an Epicurean context, this is not to be taken to mean a form of individualism; the life of a wise man, as the reality of life in Epicurus' Garden shows, is not a solitary existence shorn of any form of sociability. Let us instead talk of a "restricted sociability," to be contrasted with the communal life lived primarily in the framework of the city, which does not view itself as operating in the same context as, for example, Aristotle's assertion in book one of the *Politics* that a human is "by nature a political animal": Epicurean happiness is defined by contrast with politics and requires a retreat into a more narrowly-defined community.

A "friend" is therefore more than a compatriot or occasional comrade; he is both an intimate, because of the various dispositions of character of which we approve, and someone genuinely like us, because his soul is disposed in a manner just like our own. Given these traits, and given that the friendship thus constituted is an authentically shared life, we can further suppose that the friendship will be not just a kind of coexistence but also involve serious interaction: in friendship, a soul will find additional confidence and safety (*asphaleia*) and friendship in this way is essential for happiness. *RS* 27 explains: "Among those things that wisdom provides for the happiness of a life, the most important by far is friendship." Moreover, the affection that generates friendship is a stable and constant state built on the provision of psychic tranquility; it rests on the conviction (*pistis*, *pistōma*) that this friendship will aid us and that we are free

from risk. All this is comprehensible only if the community in question is a continuous shared experience and therefore a sharing of psychological affects that makes sure that the soul is doubly reinforced in its positive state. Sharing a particular joy or indeed a continuous state of ataraxia with a friend will involve a kind of interaction between the friends' positive states of mind. As such, it seems quite wrong to think that Epicurus had a purely instrumental conception of friendship: my friend is not a passive instrument but a supplementary agent of my own happiness.

The remaining aspects of the Epicurean account are tied closely to the naturalism that governs Epicurean ethics. In a famous letter from Epicurus to his friend Idomeneus (Diog. Laert. 10.22), the recollection of shared pleasures causes a genuine improvement in well-being and an effective relief from physical pains. (The idea of literal "co-affection" is clearly suggested by *Sent. Vat.* 66: "Let us demonstrate our feelings for our friends not with lamenting at their deaths but by caring for them.") In the same vein, *Sent. Vat.* 56 says: "The wise man suffers no more if he is tortured than if his friend is tortured." The account of friendship is plausibly predicated on an underlying physiological account which would explain how the atoms of the soul will find or preserve a stable state in such a shared life and as such in promoting my friend's happiness I will promote my own. In this way the benefits of friendship encourage true other-concern in both pragmatic and physiological terms.

That friendship is not a simple instrument for happiness is what Torquatus understands when he claims that, according to some Epicureans, "there is a kind of contract (*foedus*) between wise men which ensures that they love their friends no less than themselves" (Cic. *Fin.* 1.70, cf. 2.83). Indeed, the precise role of friendship in the good life appears to have been discussed in the very heart of the school, if we believe Torquatus' exposition. The Epicureans he mentions last hold that friendship, just like the virtues, is intrinsically linked to pleasure (*Fin.* 1.68) and, as Epicurus elsewhere insists, it is friendship that produces the more pleasure (*RS* 40, Cic. *Fin.* 1.65). The position of those Epicureans whose views are presented in the remainder of Cicero's text is relatively clear: the wise man has the same feelings towards his friend as to himself and is as open to his friend's pleasure as his own. This is a familiar and classical view: the friend is an *alter ego* such that there is no distinction, in principle, between the affection for a friend and self-love or self-interest. Friendship is as altruistic as it is egoistic.

Nevertheless, the mention of a "contract between wise men" might appear to suggest something else. We cannot exclude the notion that the concept of a contract (*foedus*) in this Epicurean context denotes not merely a kind of mutual agreement in the juridical sense but also, as is evident in Lucretius, it generally denotes a natural constraint. The mind and spirit, *animus* and *anima*, are held together by a *foedus* in the performance of their respective vital functions (Lucr. 3.416). So *foedus*, transposed in Lucretian poetic expression, does not necessarily imply a collective or personal decision to make an agreement; nor does it imply the inauguration of a new state of affairs: in the Lucretian concept of *foedera naturae* it denotes the prevailing relations between constituents of the universe. Just as nature cannot abstain from its own "agreements," so too only a fool would think it possible evade the constraints of nature. Torquatus, for his part, obviously refers to the proper and juridical sense of the term. However, he might also allude to the necessity and to the constraint which govern those who are bound by a real contract. He significantly adds that the wise men are literally "bound together"—Torquatus speaks later of a *coniunctio*—by their mutual affection. Real friendship, in fact, is a positive necessity: its particular *necessity* lies in its link with pleasure since pleasure and

mental tranquility are impossible without friendship (Cic. *Fin.* 1.67, 2.82). So it seems that the wise man may choose his friends but cannot choose not to have friends.

We therefore come to a reversal of the exclusively pragmatic justifications of friendship and the virtues: if we think that friendship is not one option among others because it is not simply an aid to happiness but, rather, a necessary condition of any happy life, then it ceases to seem like a useful means to secure one's own safety. The image of the wise man from the *Letter to Menoeceus* is very instructive in this regard. The wise man lives among others "like a god among men" (*Ep. Men.* 135). If we emphasize not merely the striking claim "like a god" but also the second part—"among men"—we may assume that a wise man essentially or by definition lives in a community. Let us add that the gods themselves live in a community, to judge by Philodemus' *On the gods* Book 3. We should therefore conclude that it is incorrect to talk about "choosing" friendship and that friendship is a bonus once someone has become wise. It is an essential aspect of the good life (cf. Mitsis 1988).

Finally, it is reasonable that a number of texts—such as *Sent. Vat.* 23 if we accept the manuscript reading—make friendship a virtue or directly associate friendship with the virtues. Similarly, of the various ethical qualities linked with friendship, Philodemus is very interested in freedom of speech or frankness (*parrhēsia*). Just as its opposite, flattery, looks only to the interests and pleasure of the flatterer, frankness is the mark of true friendship because it looks to truth and the good (see Philodemus *On frank speech*). In general terms, insofar as friendship and pleasure are interdependent, and if we admit furthermore that friendship and virtue are necessarily linked, then the associations between wise men will necessarily be virtuous.

Can friendship offer a fully satisfactory answer to the problem of egoism? Identifying the friendship between wise men, founded on stable pleasures and virtues, will not show that the hedonist life is compatible with *all* forms of virtue and, what is more, that this connection might hold between wise man in a restricted sphere of voluntary associations, will not be enough to show that it holds always and in other kinds of relationship. Although the account of friendship will allow a partial resolution in theoretical terms of the problem of interpersonal relationships, it is far from certain that it will allow a universal solution. First, the close friendship cultivated within the walls of the Garden is a very special kind of sociability in a narrowly-defined context which is hardly representative of the normal relationships between people that are mostly regulated by agreements. Justice, as Epicurus' maxims on politics make clear, is a simple contractual agreement of mutual non-aggression and this is not a "virtue" in the strong sense. But Epicurus and his followers are not necessarily thinking only of friendship between wise men whenever they evoke relationships of this kind. Diogenes of Oinoanda justifies the inscription of his work on a public monument by its therapeutic mission and the *philanthrōpia* of its author. It is a benefaction addressed not only to Diogenes' friends but to everyone, including strangers and passers-by unknown to him (3.V, 119.I Smith). The attention paid by the Epicureans to various forms of association that have appeared in the course of human history shows well that there is a kind of *philia*—a "friendship" by association—that extends far beyond the narrow confines of restricted sociability. The history of civilization in book 5 of Lucretius' poem shows how friendship (*amicities*) is something of an afterthought and a result of the development of human affairs and responses (Lucr. 5.1014). (Konstan 1996 insists on the extension of *philia* beyond the ties between wise men. He finds an implicit distinction in Epicurus between friendship itself (stable, lasting, linked

to happiness) and friends (contingent and linked by utility and loyalty).) The fear of death is for most people sufficient to break what seem to be weak "ties of friendship" (*vincula amicitiai*: Lucr. 3.84). This friendship by association does not have the necessity that belongs to the friendship between wise men.

Not every *philia*, therefore, implies an equal concern for the other or virtuous behavior. The very fact of association does not require properly moral dispositions and actions. Even if based on a kind of concord or civility, associations between humans are not necessarily virtuous from the outset. From this point of view, the friendship between wise men can only be a paradigm for more general sociability in the sense that it offers the best possible example of shared living. Other relationships of simple association, such as those between fellow citizens, are not friendships as such, but rather by agreement imitate these exemplary relationships. The imitation may not be intentional, of course, since the relationships between wise men are never offered as a model that can be directly transferred to the city; the community of the wise is at best a theoretical paradigm of natural sociability, but it is probably unable to provide satisfactory rules for living in a given political community.

That said, the friendship between wise men does resolve a more local difficulty. In living a life in a community of the sages we will live both virtuously, and with pleasure and friendship. This community of friends does therefore offer a solution to the problem of virtue because it shows that wanting the good of others is not for the wise man a possible choice among other strategies but, rather, a necessity. This necessity, even if it does relate ultimately to one's own interests, gives the Epicurean account of friendship a dimension that prevents its reduction to a simple utilitarianism. The bond of true friendship is not contingent: living in a community of friends belongs to the wise man *by definition*. The best we can do, therefore, is to live the life of a sage, something which for the Epicureans is far from an inaccessible ideal even if it is—as Lucretius says—a life "worthy of the gods" (Lucr. 3.322).

References and further reading

Alberti, A. (1995) "The Epicurean Theory of Law and Justice," in A. Laks and M. Schofield (eds.) *Justice and Generosity: Studies Hellenistic Social and Political Philosophy*, Proceedings of the Sixth Symposium Hellenisticum, Cambridge: Cambridge University Press: 161–190.

Brown, E. (2002) "Epicurus on the Value of Friendship ('Sententia Vaticana' 23)," *Classical Philology* 97: 68–80.

Brown, E. (2009) "Politics and Society," in J. Warren (ed.), *The Cambridge Companion to Epicureanism*, Cambridge: Cambridge University Press: 179–197.

Brunschwig, J. (1986) "The Cradle Argument in Epicureanism and Stoicism," in M. Schofield and G. Striker (eds.) *The Norms of Nature*, Cambridge: Cambridge University Press: 113–144.

Erler, M. and Schofield, M. (1999) 'Epicurean Ethics', in K. Algra, J. Barnes, J. Mansfeld, and M. Schofield (eds.) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press: 617–641.

Goldschmidt, V. (1977) *La Doctrine d'Épicure et le droit*, Paris: Vrin.

Guyau, J.-M. (2002) *La Morale d'Épicure*, Paris, 1886; republished by La Versanne: Encre Marine.

Konstan, D. (1996) "Friendship from Epicurus to Philodemus," in G. Giannantoni and M. Gigante (eds.) *Epicureismo Greco e Romano*, vol. 1, Naples: Bibliopolis: 386–396.

Mitsis, P. (1988) *Epicurus' Ethical Theory. The Pleasures of Invulnerability*, Ithaca, NY and London: Cornell University Press.

Morel, P.-M. (2000) "Épicure, l'histoire et le droit," *Revue des Études Anciennes* 102: 393–411.

Morel, P.-M. (2009) *Épicure. La nature et la raison*, Paris: Vrin.

Purinton, J. (1993) "Epicurus on the Telos," *Phronesis* 38: 281–320.

Roskam, G. (2007) *"Live Unnoticed":* Lathe biôsas. *On the Vicissitudes of an Epicurean Doctrine*, Leiden-Boston: Brill.

Sedley, D. N. (1998) "The Inferential Foundations of Epicurean Ethics," in S. Everson (ed.) *Ethics: Companions to Ancient Thought 4*, Cambridge: Cambridge University Press: 129–150.
Sedley, D. (2002) "Diogenes of Oenoanda on Cyrenaic Hedonism," *Proceedings of the Cambridge Philological Society* 48: 159–174.
Striker G. (1993) 'Epicurean Hedonism', in M. Nussbaum and J. Brunschwig (eds.) *Passions and Perceptions*, Cambridge: Cambridge University Press: 3–17.
Tsouna, V. (2007) *The Ethics of Philodemus*, Oxford: Oxford University Press.
Vander Waerdt, P. (1987) "The Justice of the Epicurean Wise Man," *Classical Quarterly* 37: 402–422.
Warren J. (2002) *Epicurus and Democritean Ethics. An Archaeology of* Ataraxia, Cambridge: Cambridge University Press.
Warren J. (2004) *Facing Death: Epicurus and his Critics*, Oxford: Clarendon Press.
Warren J. (2007) "L'éthique," in A. Gigandet and P.-M. Morel (eds.) *Lire Épicure et les épicuriens*, Paris: Presses Universitaires de France: 117–143.
Woolf, R. (2009) "Pleasure and Desire," in J. Warren (ed.) *The Cambridge Companion to Epicureanism*, Cambridge: Cambridge University Press: 158–178.

Related chapters

29. The Cyrenaics
30. The Stoic system: ethics and nature
32. Epicurus' Garden: physics and epistemology
34. The Hellenistic Academy
35. Early Pyrrhonism: Pyrrho to Aenesidemus

Note

Chapter translated from the original French by James Warren.

34
THE HELLENISTIC ACADEMY

Katja Maria Vogt

After the classical period of Greek philosophy, Plato's Academy turns skeptical. This development is, first and foremost, a rediscovery of Socratic thought. For the Hellenistic philosophers, Socrates is associated with a life of investigation. Socrates' quest for knowledge is seen as a quest for a rationally guided, good life. Socratic investigation, however, is investigation that is not-yet-concluded. Answers have not yet been found, and one must keep searching, or otherwise one would give up on one's commitment to the acquisition of knowledge. The set of questions that, accordingly, occupies the philosophers in the Hellenistic Academy, is whether knowledge can be found, how one is to live while one has not yet found it, and how one is to avoid presumed knowledge, which is identified with belief and ignorance. These questions are central to the philosophies of Arcesilaus (316/5–241/0 BC), the first Academic skeptic and head of the Academy from 266–268 BC, and the second major Academic skeptic, Carneades (214–129/8 BC).

Hellenistic philosophy is somewhat like philosophy today: a set of debates among a relatively large group of interlocutors, some of them contemporaries who actually engage in philosophical discussion with each other, some of them powerful sources of inspiration and points of reference from the past. An interpretation of Academic Skepticism must reconstruct these debates, and thus a conversation between quite a number of participants in them. Several of them did not write anything, so that we draw on reports from third parties. When it comes to assessing the arguments of a particular philosopher, the sources are often inconclusive. But luckily, this does not take away from the philosophical richness of Academic skepticism. Hegel says about the numerous interlocutors and layers of report in Plato's dialogues that, by introducing so many debaters and narrators, Plato removes the arguments from particular speakers (Hegel 1986: 25). He makes his readers focus on the philosophy, not on who-says-what. This is how we can view the study of Academic skepticism. While, as historians, we would obviously prefer to know more, as philosophers we can focus on the arguments and the philosophical sophistication of the relevant debates.

Reading Plato

Strictly speaking, Arcesilaus should not be called the first Academic skeptic—the designation "skeptic" postdates Arcesilaus. Perhaps one should say that Arcesilaus is a

Socratic. In the eyes of later skeptics, the history of Academic skepticism needs to be told as a history of different stages in the engagement with Plato, and that is, in part, with Socrates. Accordingly, a reconstruction of Academic skepticism must begin with some serious engagement with Plato. We need to be aware of the ways in which philosophers in the Academy engaged with Plato's dialogues in order to comprehend their thought.

Consider how the development of Academic philosophy unfolds from the point of view of a rivaling skeptical school, Pyrrhonism:

> According to most people there have been three Academies—the first and most ancient that of Plato and his School, the second or middle Academy that of Arcesilaus, the pupil of Polemo, and his School, the third or New Academy that of the School of Carneades and Cleitomachus. Some, however, add as a fourth that of the School of Philo and Charmidas; and some even count that School of Antiochus as a fifth [...] Plato has been described by some as dogmatic (*dogmatikon*), by others as "aporetic" (*aporētikon*), and by others again as partly dogmatic and partly aporetic. For in his dialogues which are exercises (*gumnastikois logois*), where Socrates is introduced either as playing with people or as contesting with sophists, they say that his distinctive character is either "gymnastic" or "aporetic"; but that he is dogmatic where he makes assertion seriously through Socrates or Timaeus or someone similar.
>
> (Sextus Empiricus, *Outlines of Scepticism* [= Sext. Emp. *Pyr.*] 1.122 (tr. Annas and Barnes with changes))

In this excerpt, different phases of Platonism are seen as connected to different readings of Plato. Some read Plato as if he put forward substantive theories, and thus, in the terms of later skepticism, as a "dogmatist." This reading of Plato—the doctrinal or Platonist reading—can be ascribed to Academics before and after the skeptical phase of the Academy. On this reading, Plato holds a metaphysical doctrine, sometimes called the Two Worlds Theory [TWT]. According to TWT, the Forms are the only entities that truly *are*; perceptible particulars merely *become*. TWT has an epistemological side. Belief is inferior to knowledge. The world of Being is accessed by higher cognitive faculties than is the world of becoming. In particular, the world of Being can be known, whereas the world of becoming is the subject-matter of belief and perception. Further, the Platonist reading of Plato tends to ascribe a psychology to Plato according to which the soul has three motivational powers: reason, spirit, and the appetites (call this, Tripartite Psychology [TP]). These powers can be in conflict. Accordingly, virtue can be explained in terms of the right state of each power combined with the right relationships between the three powers.

There are further prominent ideas that could be listed as "Platonic doctrines." But for present purposes, TWT and TP are particularly relevant. In these theories, Plato is perceived as diverging importantly from Socratic legacy. Socrates presumably did not think that there were Forms. His "what is X?" questions (for example, "what is virtue?") aim for the account of X, but they do not envisage X as a theoretical entity. Also, while Socrates is associated with the view that beliefs are, as compared to knowledge, inferior and a deficient kind of judgment, he does not seem to have argued that belief and knowledge have different objects.

TP is thought to differ from so-called Socratic Intellectualism, according to which an account of virtue need not appeal to any other motivational faculties than reason:

virtue is knowledge, or, in other words, the excellent state of reason. That is, the Platonist reading of Plato has two important features: it ascribes substantive theories to Plato, and it sees Plato as moving away from Socrates. Where Socrates qua speaker in Plato's dialogues proposes the substantive ideas that are seen as Plato's mature theories, he is considered a mere place-holder, rather than representative of the historical Socrates.

However, there is also a reading of Plato that emphasizes a commonality between Socrates and Plato, namely commitment to investigation. According to this reading, which I shall call the Socratic reading, even dialogues that appear to put forward positive doctrines in fact do not. While theories are scrutinized, there are open-ended lines of investigation, and on the whole, central questions remain unresolved. The *Phaedo* may serve as an example. To many, this dialogue puts forward some central Platonic doctrines about the immortality of the soul. But from the point of view of those who focus on difficulties rather than solutions, it may appear that none of the arguments for the immortality of the soul is presented as ultimately compelling. To them, the dialogue might express the hope that a proof can be found, and the admission that up to now this has not been achieved. This kind of investigation is a blueprint for skeptical investigation: a question is raised, and elaborate theories are available for consideration; each theory is to be scrutinized, but quite possibly none of them shall be sufficiently convincing, and in the end, we must keep investigating.

Arcesilaus was supposedly the first Academic who "meddled with" Platonic theory (*logos*) (Diogenes Laërtius 4.28). That is, he was the first to call into question the reading of Plato that focuses on substantive theories. Instead, he emphasizes the Socratic side of the texts (on the point that Arcesilaus had copies of Plato's dialogues, cf. Diog. Laert. 4.31). The Socratic reading of Plato did not fare well within the history of thought. Platonism shapes, in many ways, how we read Plato up to this day. Most scholars of ancient philosophy find it natural to ascribe a set of positive views to Plato. However, from the point of view of the Hellenistic Academy, Plato is first and foremost an investigator. Socrates, too, is identified with a commitment to reason. Socrates is a forefather of skepticism insofar as *skepsis* literally means investigation: skepticism is a philosophy devoted to investigation. The life of investigation comes with certain convictions: knowledge is good; knowledge is integral to a good life; knowledge and virtue are intimately connected; vice is ignorance. That is, and it is important to emphasize this point, Socrates is identified with positive ideas and a philosophy of his own.

The standard historical account of early Greek philosophy does not adopt this Hellenistic perspective on Socrates. It is shaped by a distinction that Aristotle draws, between an aporetic historical Socrates, who presumably figures in Plato's early dialogues, where he asks definitional questions that he himself does not have answers to, and a doctrinal Platonic Socrates, the main speaker in middle and later dialogues, who no longer represents the historical Socrates (*Soph. el.* 34, 183b6–8). This distinction has been formative for the predominant narrative in the history of philosophy. But it clearly is insufficient. The problem is not that it privileges an Aristotelian reading of Plato over a later inner-Academic reading, for which there could arguably be reasons. Rather, it picks up only one strand of Aristotle's references to Socrates. For in fact, Aristotle ascribes precisely those ideas about virtue and knowledge to Socrates that the Hellenistic philosophers ascribe to him, as, for example, *Nicomachean Ethics* Book 7 shows.

What follows from this for the present purposes? Importantly, it means that Socrates can plausibly be seen as a thinker who is associated with certain philosophical ideas. To invoke Socrates is not only to invoke someone who is good at asking questions and

interrogating others. It is also to invoke someone who finds continued philosophical investigation valuable. This is, in itself, a substantive claim. It is closely connected to the views about virtue and knowledge that are ascribed to Socrates. If the good life is the life of the knower, then surely one should aim for knowledge as much as one can. One should call into question one's beliefs as well as the beliefs of others, aiming to weed out falsehoods. These are important starting-points of Academic skepticism (Cicero *Acad.* 2.74, 1.46)

A Socratic attitude to belief

A central preoccupation of Academic Skepticism grows out of this way of seeing Socrates: the idea that, in pursuing knowledge, one aims to get rid of belief (*doxa*). This thought needs to be explained, in particular because it is hard to comprehend from today's perspective. According to a standard notion of belief in contemporary philosophy, beliefs are acceptances of something as true (either in the sense of the cognitive act of judgment, or in the sense of the doxastic attitude of holding to be true). This contemporary notion of belief is value-neutral. It does not suggest that beliefs are deficient. Rather, the most successful beliefs might be cases of knowledge: where a belief is true and justified (or meets some other standards), it qualifies as knowledge. What is important is that this is not the notion of belief we find either in Socrates, or Plato, or in Stoic or Academic philosophy. For these philosophers, beliefs are deficient judgments and cases of ignorance (Vogt 2012). What does this mean? In answering this question, Plato's *Apology*, *Meno*, and *Republic* are helpful texts to consider.

In the *Apology*, Socrates goes around talking to various groups of people in Athens (politicians, poets, craftsmen) who claim to have knowledge about important matters (20e–22e). After some interrogation, Socrates' interlocutors get caught up in inconsistencies. Apparently, they do not know what they take themselves to know. Socrates is better off than these other people because, though he, too, does not know about important matters, he at least knows that he does not have this knowledge. The ignorance of his interlocutors is presented as presumed knowledge. This is an important idea. In the discussions that interest us here, ignorance is not understood as the absence of an attitude toward a certain content (as in, for example, my being ignorant about something in biology about which I have never even heard). Rather, ignorance is a state of holding-to-be-true. In endorsing something, one commits oneself as if one had knowledge. Accordingly, ignorance is a truth-claim that misunderstands itself as a piece of knowledge. Plato does not discuss beliefs (*doxai*) in the *Apology*, but it seems safe to say that Socrates' interlocutors have mere beliefs, and that these beliefs are cases of ignorance (that is, presumed knowledge).

Consider next the *Meno*. After several attempts at answering the question "what is virtue?" Meno formulates the so-called Debater's Argument. One cannot investigate, neither what one knows nor what one does not know. In the former case, there is no need to investigate: one already knows the matter. In the latter case, one would not know what to look for and would not recognize it if one found it (80d–e). Do not Meno and Socrates investigate jointly throughout their conversation, however? While they do not know what virtue is, they have some views on the issue, and thus they can begin to investigate.

Should we, accordingly, say that beliefs are the starting-point of investigation? In discussing the Debater's Argument, Socrates introduces the notion of belief (*doxa*). He

describes how the boy who does a geometrical exercise for the first time in his life can come up with replies to questions: he says what seems to him (*dokein*, 83d4), or, in other words, he comes up with his beliefs (*doxai*, 85b12, c4, e7, 86a7). With more exercises, the boy's beliefs shall become knowledge (85c9–d1). But Plato does not dismiss the dichotomy between knowing and not-knowing that figures as a premise in the Debater's Argument (one either knows something or one does not know it). Beliefs are a kind of ignorance: while it seems that something is so-and-so, one does not know it (85c6–7).

After the Debater's Argument has been set aside, or perhaps even refuted, Socrates develops and employs the so-called hypothetical method (86c–96c). One can formulate a thought, set it up as a hypothesis, thus explicitly acknowledging that one does not know how things are, and proceed to test the hypothesis. In seeking knowledge, we must begin with the thoughts we have on a given issue. But we should not endorse them, thereby making them into beliefs. Rather, we should hypothesize them, and thus launch our investigations.

In a famous passage in Plato's *Republic*, right before conversation turns to the Form of the Good, Socrates says that beliefs without knowledge are crooked and shameful (506c–d; on beliefs with knowledge, cf. Vogt 2009). Throughout Plato's dialogues, Socrates is presented as carefully stepping back from belief. Things seem to him to be a certain way, but he is aware that he does not have knowledge, and he does not endorse his thoughts as true accounts of how things are. Rather, he always inserts a proviso, thus holding back from forming beliefs. In the *Republic*, he refuses to utter any beliefs about the Good. The most he is willing to do is speak in metaphors, the similes of the Sun, Line, and Cave. In the *Meno*, core intuitions about virtue are not endorsed, but merely used as hypotheses (even such ideas as "virtue is good," which Socrates surely does not expect to turn out to be false, are considered as hypotheses, 87d2–3).

This line of thought provides one way of describing the core concern of Academic Skepticism: the Academic Skeptics buy into the project of a Socratic life *without belief*. That is, they are motivated by the Socratic intuition that beliefs are cases of presumed knowledge that are in fact ignorance, and thus bad states and attitudes. The only way to free oneself of these states and attitudes is to investigate. The aim of investigation is knowledge. As long as knowledge has not been attained, it is better to be in the process of investigation, rather than have mere beliefs.

Pyrrho, Epicurus, and the Stoics: criteria of truth

This set of concerns gets sharpened once word is out that, according to an enigmatic figure called Pyrrho (365/60–275/70 BC) things are indeterminate, so that we cannot claim that they are this-or-that way. Construed in this fashion, early Pyrrhonism is a metaphysical position: the nature of things is indeterminate (Bett 2000, 2002/2006). This has the stark consequence that *none* of our beliefs are true or false. There is no determinate reality that can be captured truly or falsely.

Epicurus (341–271 BC) and Zeno (334/3–262/1 BC), the founder of Stoicism, arguably respond to Pyrrho (Long 2006: 59). Of course, Pyrrho is not their main or even predominant philosophical influence; their philosophies are rooted in a number of debates among their predecessors and contemporaries. Pyrrho's challenge is extreme, however, and calls for a response. Epicurus and Zeno try to explain what can play the role of decider, in cases where something could be this-or-that way. That is, they formulate criteria of truth. The question of whether, absent knowledge, one should abstain from

belief, gets a companion: the question of whether there is any way in which truth can be recognized—whether there is something about true impressions that flags them as true, so that one can safely assent to them.

This issue is also important to the Socratic concerns we considered a moment ago: part of the reason why the Debater's Argument arises is that one does not recognize a truth if one happens to encounter it. In searching for an answer to a question, one might come across the true answer; but truth is not a property that announces itself. In every judgment, something appears true to the cognizer, otherwise she would not make the judgment; but whether it really is true is a different matter. Truth is at once the central epistemic value or end, and normatively insufficient: the epistemic norm "assent to truths" does not provide enough guidance, because truths are not recognizable as such.

For Epicurus, all sense-perceptions are true. Arguably, this claim is a direct response to Pyrrho's claim that sense-perceptions are neither true nor false (Long 2006: 59). While Pyrrho means to express that there is no determinate reality that they would capture truly or falsely, Epicurus seems to be saying that sense-perceptions are physical events, taking place between the cognitive faculties of the perceiver and external physical reality; insofar as they are these events (and insofar as the perceiver is affected the way she is), they are true. All sense impressions are true, but falsity enters the picture immediately thereafter. We make judgments based on our sense impressions: "we judge some things correctly, but some incorrectly, either by adding and appending something to our impressions or by subtracting something from them, and in general falsifying a rational sensation" (Epicurus *RS* 23, trans. Long and Sedley, with modifications). That is, our judgment is the source of falsity. Epicurus' normative epistemology is then concerned with the question of how we can avoid false judgment, and accordingly, with the question of which kinds of norms or standards we are to apply in forming beliefs. Epicurus coins the notion of a yardstick (*kanōn*) or criterion (*kritērion*), thus introducing a core conception of Hellenistic epistemology. Sense-perceptions, affections, and preconceptions are criteria of truth (Diog. Laert. 10.31): they are *evident* (*Ep. Hdt.* 82). And they are true in the sense that, *de facto*, the cognizer is affected in such-and-such a way by a physical reality. Our judgments are to be measured against these realities. True beliefs are those that are attested and those that are uncontested by the evident (*enargeia*). False beliefs are those that are contested and those that are unattested by the evident (Sext. Emp. *Math.* 7.211–16).

Zeno too engages with knowledge within this newly developed conceptual framework. That is, in asking how one can make sure to accept only truths, he formulates a criterion of truth: the cognitive impression (*phantasia katalēptikē*). Cognitive impressions, he argues, arise from what is, and are stamped and impressed exactly in accordance with what is, thus being clear and distinct (Diog. Laert. 7.46). Not all true impressions are like this; but a sub-class of truths is cognitive, and thus identifies itself as true. If we accept only cognitive impressions, we do not accept all truths. But we make sure that, whenever we accept an impression as true, it in fact is true. This kind of proposal, as well as Epicurus' notion of the evident, clearly invites skeptical responses.

Arcesilaus

It is time to turn specifically to the philosophy of Arcesilaus. Like Socrates, Arcesilaus did not write anything. His philosophy must be reconstructed from Sextus' comparisons between Pyrrhonian and Academic skepticism, Cicero's *Academica*, and a number of shorter reports.

Arcesilaus embraces a method that scholars call dialectical (Couissin 1929 [1983]). This method develops further a tradition that goes back to early Greek sophistic argument, and was adapted by Socrates. Philosophy, according to this method, is engaged in as an exchange between a questioner and an answerer, rather than by one thinker who lays out his or her arguments. The questioner gets the answerer to commit to a certain position, and then proceeds, through further questions, to examine this view. Doing so, the questioner employs the answers already given as premises. However, these premises thereby do not become the questioner's views.

From the Socratic point of view, this method has a great advantage: it allows one to investigate without endorsing any premises of one's own. Not unlike the *Meno*'s hypothetical method, the dialectical method aims to make sure that the questioner need not accept anything as true in order to be able to investigate. The skeptical investigator, who takes on the role of questioner, need not begin from beliefs of her own. She can rely on the fact that her respondent has some beliefs. Investigation begins with someone else's theory, and proceeds via the premises to which the other person commits herself.

The fact that this is a prominent feature of Arcesilaus' philosophy has long been noted (cf. Cicero *Fin.* 2.2.). However, focus on this feature can lead to a simplifying interpretation of Arcesilaus' thought. When we think of *one* questioner and *one* answerer, it is tempting to put just one person into the place of the dogmatist (that is, the person who commits herself to a position). In the history of interpreting Greek Skepticism, there has been widespread agreement that the Stoics are the central opponents of the skeptics. In particular, Zeno has been placed at the other end of the conversation that we need to envisage in order to understand Arcesilaus' philosophy. Arcesilaus is, however, roughly 20 to 30 years younger than Zeno. We can assume that he grows up in the Academy during a time in which Zeno must have been one of its most impressive members. Zeno seems to have formulated his views between 300 to 275, while still being, at least for many years, a member of the Academy. Arcesilaus then argued against Zeno's views c. 275 to 240, when Zeno was already retired (Zeno died c. 263 BC) (cf. Brittain 2006: xiii; Alesse 1999: 115 f.; Long 2006: ch. 5). The received wisdom, that Arcesilaus' skepticism develops through actual back-and-forth between him and Zeno, needs to be modified.

With a view to the criterion of truth, it is tempting to think that skeptical thought develops almost exclusively in response to and engagement with Stoic philosophy. The relevant framework in the philosophy of mind—that we have sensory and non-sensory impressions to which we take attitudes of acceptance, rejection, or suspension—is, while in some respects shared by Epicureans, distinctively Stoic. Absent this framework, the central skeptical notion of suspension (in not forming a belief, the skeptic suspends judgment) is incomprehensible. This notion, however, is crucial to Arcesilaus' philosophy. Lacking a criterion of truth, Arcesilaus' skeptic suspends judgment about everything (Sext. Emp. *Pyr.* 1.232).

Many of Arcesilaus' arguments are immediately concerned with the Stoic conception of cognitive impressions. Arcesilaus argues that there might be a non-cognitive impression (that is, an impression that misrepresents things) that is indistinguishable from a cognitive impression. The Stoics seem to have responded to this objection by adding a clause to their definition of the cognitive impression: "of such a kind as could not arise from what is not" (Diog. Laert. 7.46, 54; Cicero *Acad.* 1.40–1, 2.77–8; Sext. Emp. *Math.* 7.247–52).

What about the skeptic's own life, however? Arcesilaus' skeptic lives without belief and without knowledge; but our ordinary lives involve belief-formation. Otherwise, we

arguably cannot even eat or avoid danger, let alone perform more complex and sophisticated activities, including investigation. The argument that the skeptic cannot act or go about her daily life in a manner consistent with her skepticism is often called the Apraxia Challenge. In line with the Socratic commitment to reason, Arcesilaus aims to present the skeptic's life as a life guided by reason and lived by the standards that reason puts up (Cooper 2004). Accordingly, he addresses versions of the Apraxia Charge that do not focus on brute survival. Rather, he thinks he must reply to versions that call into question whether the skeptic's life is the life of a rational agent, and whether it is a life that is plausibly seen as an attempt at living well. We can call these objections the Animal Charge (is the skeptic reduced to the activity of non-rational animals?) and the Eudaimonist Charge (does the skeptic plausibly aim to lead a good life?) (Vogt 2010a).

Consider a passage from Plutarch:

> (1) For those who attend and listen, the argument runs thus [that is, Arcesilaus' argument against the Stoics]. The soul has three movements—impression, impulse, and assent. The movement of impression we could not remove, even if we wanted to; rather, as soon as we encounter things, we get an impression and are affected by them. The movement of impulse, when aroused by that of impression, moves a person actively towards appropriate objects, since a kind of turn of the scale and inclination occur in the commanding-faculty. So those who suspend judgment about everything do not remove this movement either, but make use of the impulse which leads them naturally towards what appears appropriate. What, then, is the only thing they avoid? That only in which falsehood and deception are engendered—belief-formation (*to doxazein*) and precipitately assenting, which is yielding to the appearance out of weakness and involves nothing useful. For action requires two things: an impression of something appropriate, and an impulse towards the appropriate object that has appeared; neither of these is in conflict with suspension of judgment. For the argument keeps us away from belief (*doxa*), not from impulse or impression. So whenever something appropriate has appeared, no belief is needed to get us moving and proceeding towards it; the impulse arrives immediately, since it is the soul's process and movement [...]
>
> (2) "But how is it that someone who suspends judgment does not rush away to a mountain instead of to the bath, or stands up and walks to the door rather than the wall when he wants to go out to the market-place?" Do you [the Epicurean Colotes] ask this, when you claim that the sense-organs are accurate and impressions true? Because, of course, it is not the mountain but the bath that appears a bath to him, not a wall but the door that appears a door, and likewise with everything else. For the rationale of suspending judgment does not deflect sensation or implant a change in the irrational affections and movements themselves, which disturbs the occurrence of impressions; it merely removes our beliefs, but makes natural use of all the rest.
>
> Plutarch *Adv. Col.* 1122A–F (trans. Long and Sedley, with changes)

In interpreting this passage, scholars tend to focus on (1). There, Plutarch explains how Arcesilaus responds to Stoic critics. According to the Stoics, there are three movements of the mind—impression, assent, and impulse to action. Impulse cannot occur without assent. Arcesilaus argues that one can avoid assent, but not the other

two movements. Sensation (or impression), he argues, brings forth impulse, and that is all that is needed for action. The trouble with this line of argument, as Plutarch presents it, is that it looks dogmatic. Arcesilaus seems to put forward his own account of action, stating against the Stoics that assent is not needed for action. Another problem is that, if the skeptic's actions occur without her own rational endorsement, it would seem that Arcesilaus ascribes the activities of non-rational animals to the skeptic, rather than the rational action of the human being. If this was Arcesilaus' strategy, he would rob the skeptics of their rationality, and he would be unable to explain how the skeptic, by choosing one course of action over another, aims to lead a good life (Cic. *Acad.* 2.37–9).

In order to see how Arcesilaus responds to these concerns, we need to consult a further piece of evidence. Apparently in response to the Eudaimonist Charge, Arcesilaus proposes that the skeptic adheres to the reasonable (*eulogon*) (Sext. Emp. *Math.* 7.158; 7.150). The precise interpretation of this notion is controversial (cf. Striker 2010; Vogt 2010a). But the main point seems to be this: the skeptics discriminate between impressions, and are rationally guided by whether a given course of action seems reasonable to them, without thereby accepting anything as true.

Turn now to the second half of Plutarch's report, (2). Arcesilaus responds to Epicurean critics. By using an Epicurean example, Arcesilaus explains how the skeptic can leave the room without running into the wall, but also without forming a belief as to where the door is located. He exploits the Epicurean view that belief or judgment introduces falsehood, while sense-perception by itself is free from falsity and a-rational. Like the Epicurean, the skeptic can keep apart sense-perception and judgment. The sense-perception of the door can guide the skeptic, so that she walks through the door rather than into the wall, without any judgment being involved.

Carneades

Like Arcesilaus, Carneades does not write anything, and accordingly, we again depend on Cicero, Sextus Empiricus, and other authors when we reconstruct his philosophy. A famous incident highlights that his dialectical method is not only indebted to Socrates, but also to earlier sophistic practices of arguing for both sides of an issue. On an embassy to Rome in 156/5 BC, Carneades apparently argued for justice one day, and against justice the next. Carneades did not aim to convince his audience of either of these positions. Most immediately, he wanted to show that the theories that Plato, Aristotle, and others put forward are not compelling (Lactantius *Epitome* 55.8, Long and Sedley, LS 68M). But we can speculate that his performance had a disconcerting effect. If a gifted speaker can convince his audience of *p* one day, and of not-*p* the next, one should be warned. Apparently, one needs to think ever more carefully. Carneades' method invites his listeners to investigate as skeptics: to scrutinize their own thinking continually, not accepting anything in a precipitate fashion.

Carneades pursues further skeptical criticism of the dogmatists' criteria of truth. The first in a series of arguments he puts forward (Sext. Emp. *Math.* 7.402–10) concerns the link between mental states and actions; it is part of a line of thought that is targeted at Stoic philosophy. Even if there were cognitive impressions, Carneades argues, people who act on them are not guided by their impressions in any other way than people in states of madness. Carneades here takes a perspective that is, in other contexts, detrimental to skeptical positions: the perspective of inferring from exhibited behavior

to mental states. Generally speaking, we might think that this approach (shared by some contemporary philosophers of mind) is fatal to skepticism. If the skeptic indeed lives a more or less ordinary life, as the skeptics claim that they do, then the observer shall ascribe ordinary mental states to them, including beliefs. Carneades' first argument is typical for those variants of Greek skepticism that engage with several dogmatic approaches (as is also the case in Sextus' Pyrrhonism). Skeptics of that type may well employ an argument against one opponent to which, in another context, they would not resort. Carneades' first move—to infer from external behavior to mental—strikes me as this kind of argument: it should better be employed only in a well-defined context, otherwise it would harm rather than help the skeptic.

Second, Carneades cites examples in which objects are highly similar to each other, as, say, two eggs or two grains of sand are. Do the Stoics claim that we are able to distinguish any two such items? The Stoics admit that, in certain situations, the wise person may, absent an impression of how things are, assent to the reasonable (*eulogon*) (Diog. Laert. 1.177). The wise person may also suspend judgment. But generally speaking, it is part of wisdom to have trained oneself so as to be able to perceive the smallest features and differences in things (Cic. *Acad.* 2.57), at least where it may be important to do so. This qualifier is important. The Stoics think that wisdom consists of knowledge in logic, ethics, and physics. Roughly speaking, we may say that wisdom consists of knowing the things that are relevant to leading a good life (Vogt 2008: ch. 3). Whether a certain grain of sand is the same grain of sand one saw yesterday may be irrelevant. On the contrary, someone who would aim to keep apart each grain of sand from the others might be like the proverbial irrational agent in contemporary philosophy of action—the agent who counts the blades of grass in her garden because to her, this is what truly matters.

In principle, however, two grains of sand are distinguishable. This is a thesis in Stoic physics: no two items in nature are identical, and their features are perceptible. Accordingly, should it become important to the leading of a good life to distinguish between grains of sand, the wise person would train herself to do so (Cic. *Acad.* 2.57). Today, we may think of a different example. It is important to the leading of our lives that we can distinguish minute features of cells; accordingly, scientists train themselves to be able to perceive these features.

Carneades insists that the claim in physics—that no two items in the universe are identical—is irrelevant to the contested issue. Whether or not that is the case, two different items could still be indistinguishable for all perceivers (Cic. *Acad.* 2.83–5). In response, the Stoics might have insisted on their distinction between expert impressions and non-expert impressions (Diog. Laert. 7.51). It is quite implausible that similar items are equally indistinguishable for the trained and the untrained. Where it matters that one makes distinctions, scientists are inventive in improving the conditions of observation. This kind of rejoinder would be consistent with Stoic philosophy, but it is unclear to what extent the Stoics elaborated on it. Another response is well attested. The Stoics add a further component to their definition of the cognitive impression: "one that has no impediment"; sometimes an impression is unconvincing due to external circumstances (Sext. Emp. *Math.* 7.253). This addition is the last move in this particular strand of the debate.

Do the Stoics or the skeptics win the argument? The original Stoic account of the cognitive impression relies heavily on the idea that a cognitive impression makes it clear through *itself* that it is cognitive (Cic. *Acad.* 1.40–1). If it is admitted that an impression

could phenomenologically appear to be cognitive, while external circumstances call this into question, the Stoics may abandon their strongest intuition.

However, perhaps it is misguided to assume that cognitive impressions make themselves recognizable through their phenomenology. Perhaps they are, at least in part, to be identified as cognitive due to their causal history. For example, I might be able to identify the impression that this (what I look at while typing) is the screen of my computer because the causal history of this impression is immediately accessible to me. If this is the idea, then the additional clause might help (Frede 1983). It might exclude cases where we are aware that there are impediments. For example, I might have what looks like a cognitive impression that it is raining when I look out of my window. The grass is full of drops of water and more drops are floating through the air. But I refrain from assenting: the wall around the window constitutes an obstacle of which I am aware. I remove the obstacle by walking outside. Now I see that someone is watering the garden. However, the causal version of the Stoic proposal might not be much stronger than the phenomenological version. Are the Stoics committed to the view that only those impressions, the causal histories of which are fully transparent to us, are cognitive? This is a strong claim, and one that would call for a number of specifications. The evidence does not suggest that the Stoics pursued this in detail.

In order to see how Carneades engages not only with Stoic arguments, we need to turn to his own conception of the criterion. Carneades argues that the skeptic adheres to the rationally persuasive (or the convincing or compelling), the *pithanon*. Carneades puts forward a three-stage account: (1) In matters of importance, skeptics adhere to the persuasive. (2) In matters of greater importance, they adhere to persuasive impressions that are undiverted by surrounding impressions. (3) In matters that contribute to happiness, they adhere to persuasive, undiverted, and thoroughly explored impressions. In order to thoroughly explore an impression, one must carefully examine the surrounding impressions, asking whether they in any way harm the persuasiveness of the impression with which one is centrally concerned (Sext. Emp. *Math.*7.166–84).

In formulating this criterion, Carneades responds, like Arcesilaus, to ambitious versions of the Apraxia Charge, the Animal Charge, and the Eudaimonist Charge. He aims to show that skeptical action is the agency of a rational being, and that the skeptic is committed to leading a good life. Carneades explains his criterion with an example (Sext. Emp. *Math.* 7.187). A skeptic is looking for a rope, but the room is dark. Snakes can look like ropes, and accordingly, it is important to get things right. The skeptic shall poke at the object that looks like a rope, making sure that it does not move—movement would be a surrounding impression that takes away from the persuasiveness of the impression that the object is a rope.

Though this is an example of an action (to pick up what looks like a rope), Carneades' criterion is said to be a criterion of truth, not a criterion of action (Sext. Emp. *Math.* 7.173). Sextus, whose report we are drawing on here, is well aware of the distinction. When he explains Pyrrhonian skepticism, he explicitly differentiates between a criterion of truth and a criterion of action, emphasizing that the Pyrrhonians claim to have merely a criterion of action (Sext. Emp. *Pyr.* 1.21). From his point of view, this means that the Pyrrhonians do not put forward their own epistemology; rather, they merely explain what guides their activities. Sextus' report may be right. Carneades might aim for more than an explanation of skeptical life. He might be putting forward his own epistemology. This is a highly contentious claim, for, generally speaking, it is assumed

that the skeptics do not formulate theories of their own (which would make them, in their terms, dogmatists). Does Carneades advance an epistemology of his own?

Scholars tend to see two options, neither of which is completely convincing (Couissin 1929 [1983], Striker 1980, Bett 1989 and 1990, Allen 1994 and 2004 [2006], Brittain 2001, Obdrazalek 2006). Qua skeptic, one might argue, Carneades simply cannot formulate his own theory of the criterion of truth; the texts that ascribe to him a criterion of truth must be misleading. This interpretation, however, is too simple; it neglects relevant portions of the evidence. Or one ascribes an epistemology to Carneades. However, in this case one in effect argues that one of the major Greek skeptics is not a skeptic, but a dogmatist. A third reading, and one that I find more compelling, is as of yet under-explored. Carneades might advance his three-stage criterion in a dialectical exchange with Epicurean interlocutors.

What is the evidence for this proposal? Epicurean epistemology is, in many ways, a kind of methodology for the testing and examining of sense-perceptions and theoretical claims. In aiming to judge correctly, we ought to assess our perceptions and theories in the context of the evident, examining closely whether they are attested or contested by it (Sext. Emp. *Math.* 7.211–216).

Suppose that Carneades is speaking to proponents of Epicurean methodology. In order to keep oneself from judging falsely, they say, one must thoroughly examine a perception or thought, testing the non-evident through appeals to the evident. Carneades would call into question the Epicurean notion of the evident. But he might nevertheless draw on the premises of his Epicurean interlocutors. He could argue that, *as they say*, impressions occur in the context of other impressions, and that, while the skeptics have not yet found anything evident, they can proceed by employing the Epicurean premise that some impressions are comparably easier to assess than others. For example, that it is dark may not be evident in the strong, dogmatic sense. But it may be highly persuasive. Similarly, the non-sensory impression that ropes and snakes look similar when coiled up may not be evident, but still be highly persuasive. Compared with these persuasive impressions, the blurred vision of an object in the dark room might have a low degree of persuasiveness. It thus needs to be assessed in the light of those impressions that come with a high degree of persuasiveness.

However, there is another complicated issue in the interpretation of Carneades' philosophy: the question of whether the skeptic forms beliefs. In adhering to persuasive impressions, Carneades says, the skeptic approves them (Cic. *Acad.* 2.99). Approval is not assent in the sense in which the dogmatists conceive of assent. But still, it is a kind of assent (Cic. *Acad.* 2.104). This distinction is famously elusive. Carneades' successors and students are unable to agree amongst each other on how to interpret it. Clitomachus (head of the Academy from 127 to 110 BC) thinks that Carneades' approval does not amount to belief (*Acad.* 2.78, see also 2.59, 2.67; Levy 2010). Philo of Larissa (159/8–84/3 BC) argues that, in approval, one forms some kind of belief (on the difficulties of interpreting Philo, cf. Brittain 2001, 2006).

A belief in the sense of the dogmatists is a truth-claim, and truth-claims are incompatible with skepticism. But what other sense of belief is available? One idea that we encountered at the beginning of this chapter might be relevant here. Recall that Socrates, when asked what he thinks, refuses to advance any beliefs. However, Socrates is willing to set up his thoughts as hypotheses, so as to have starting-points in investigation. Perhaps Carneades invokes a version of this idea. According to Cicero, he says that the wise person (and this is the skeptic) can hold beliefs if she fully under-

stands them to be beliefs, and that is, we can add, *merely* beliefs, rather than knowledge (*Acad.* 2.148; cf. Striker 1980 [1996:112]; Vogt 2010b).

In conclusion, we should note that Greek skepticism has much to offer philosophically, in particular insofar as it is rather different from the kinds of philosophy that are later called skepticism. Greek Academic skepticism is, centrally, a philosophy that focuses on the quest for knowledge, a life of investigation, and the rejection of presumed knowledge.

References and further reading

Alesse, F. (1999) *La Stoa e la Tradizione Socratica*, Napoli: Bibliopolis.

Allen, J. (1994) "Academic Probabilism and Stoic Epistemology," *Classical Quarterly* 44: 85–113.

——. (2006) "Carneades," *Stanford Encyclopedia of Philosophy*, available at http://plato.stanford.edu/archives/fall2002/entries/pyrrho/, 2004, revised version 2006, available at http://plato.stanford.edu/archives/sum2006/entries/pyrrho/.

Bett, R. (1989) "Carneades' *Pithanon*: A reappraisal of its role and status," *Oxford Studies in Ancient Philosophy* 7: 59–94.

——. (1990) "Carneades' Distinction Between Assent and Approval," *Monist* 73 (3): 3–20.

——. (2000) *Pyrrho, His Antecedents, and His Legacy*, Oxford: Oxford University Press.

——. (2002/2006) "Pyrrho," in E. Zalta (ed.), *Stanford Encyclopedia of Philosophy*, 2002: http://plato.stanford.edu/archives/fall2002/entries/pyrrho/, revised version 2006, http://plato.stanford.edu/archives/sum2006/entries/pyrrho/.

Brittain, C. (2001) *Philo of Larissa: The Last of the Academic Sceptics*, Oxford: Oxford University Press.

——. (2005) "Arcesilaus," in E. Zalta (ed.) *Stanford Encyclopedia of Philosophy*, available at http://plato.stanford.edu/entries/arcesilaus/.

——. (2006) *Cicero: On Academic Scepticism*, Indianapolis, IN: Hackett.

Cooper, J. (2004) "Arcesilaus: Socratic and Sceptic," in V. Karasmanis (ed.) *Year of Socrates 2001: Proceedings*, Athens: European Cultural Center of Delphi. Reprinted in J. Cooper (2004) *Knowledge, Nature, and the Good, Essays on Ancient Philosophy*, Princeton, NJ: Princeton University Press: 81–103.

Couissin, P. (1983) "The Stoicism of the New Academy," in M. Burnyeat (ed.) *The Skeptical Tradition*, Berkeley, CA: University of California Press: 31–63 ; translation of "Le stoicisme de la nouvelle Academie," *Revue d'historie de la philosophie* 3 (1929): 241–76.

Frede, M. (1983) "Stoics and Sceptics on Clear and Distinct Impressions," in M. Burnyeat (ed.) *The Skeptical Tradition*, Berkeley, CA: University of California Press: 65–94.

Hegel, G. W. F. (1986) *Vorlesungen über die Geschichte der Philosophie II: Werke 19* (edition based on Hegel's *Werke* 1832–1945), Frankfurt am Main: Suhrkamp.

Levy, C. (2010) "The Sceptical Academy: Decline and Afterlife," in R. Bett (ed.) *The Cambridge Companion to Ancient Scepticism*, Cambridge: Cambridge University Press.

Long, A. A. (2006) *From Epicurus to Epictetus: Studies in Hellenistic and Roman Philosophy*, Oxford: Oxford University Press.

Long, A. A. and Sedley, D. N. (1987) *The Hellenistic Philosophers*, Cambridge: Cambridge University Press.

Obdrazalek, S. (2006) "Living in Doubt: Carneades' *Pithanon* Reconsidered," *Oxford Studies in Ancient Philosophy* 31: 243–80.

Striker, G. (1996) "*Kritêrion têsalêtheias*," *Nachrichten der Akademie der Wissenschaften zu Gottingen*, I. Phil.-hist. Klasse 2 (1974): 48–110. Reprinted in G. Striker (1996), *Essays on Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press: 22–76.

——. (1980) "Sceptical Strategies," in M. Schofield, M. F. Burnyeat and J. Barnes (eds.), *Doubt and Dogmatism: Studies in Hellenistic Epistemology and Ethics*, Oxford: Clarendon Press: 54–83. Reprinted in G. Striker (1996) *Essays on Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press: 92–115.

——. (2010) "Academics versus Pyrrhonists, Reconsidered," in R. Bett *The Cambridge Companion to Ancient* Scepticism: 195–207.

Vogt, K. (2008) *Law, Reason, and the Cosmic City: Political Philosophy in the Early Stoa*, New York: Oxford University Press.

——. (2009) "Belief and Investigation in Plato's *Republic*," *Plato* 9: 1–24, reprinted in K. Vogt (2012) *Belief and Truth: A Skeptic Reading of Plato*, New York: Oxford University Press: 51–70.

——. (2010a) "Scepticism and Action," in R. Bett (ed.) *The Cambridge Companion to Ancient Scepticism*, Cambridge: Cambridge University Press: 165–80.
——. (2010b) "Ancient Skepticism," *The Stanford Encyclopedia of Philosophy* (Spring 2010 edition), Edward N. Zalta (ed.) available at http://plato.stanford.edu/entries/skepticism-ancient/.
——. (2012) *Belief and Truth: A Skeptic Reading of Plato*, New York: Oxford University Press.

Related chapters

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35
EARLY PYRRHONISM: PYRRHO TO AENESIDEMUS

Luca Castagnoli

Once upon a time, in a Greek city on the Peloponnese, lived a philosopher who was deeply perplexed by our conflicting experiences of the world around us. Having witnessed the unreliability of our senses and reason, which had led others before him to despair in the possibility of knowledge, he concluded that the correct attitude towards reality was that of withholding assent from any belief and claim, whether positive or negative. While registering how things *appear* to us, he *suspended his judgment* on how things *are*. Let's call this philosopher "Mr. Skeptic." In the same city, at the same time, lived another philosopher who was equally sensitive to the variability in our experience. Impressed by the insight of those earlier thinkers who had made stability and absoluteness the mark of reality and truth, he concluded that things cannot really be in any of the variable ways in which they manifest themselves to our senses and minds. That conclusion amounted to the view that reality itself, beneath the appearances, is completely indeterminate. According to "Mr. Metaphysician" we should thus *deny* that things really are in the way in which they appear to be. A third notable thinker roamed those streets. He was uninterested in epistemological or metaphysical speculation. He was convinced that the only thing that matters to our life is virtue; this alone will give us complete self-sufficiency, which others before him had already identified as the true mark of happiness. So we should be insensible and indifferent to any other alleged good or evil, and eschew as useless any philosophical theorizing. Call this austere figure "Mr. Moralist."

True, these three did have some affinities: Mr. Skeptic and Mr. Metaphysician both made conflict and disagreement their starting point. They also shared the view that a correct understanding of reality, or at least of our prospects of knowing it, will transform our lives: both Mr. Skeptic's suspension of judgment and Mr. Metaphysician's recognition of the indeterminacy of reality were supposed, somehow, to induce in us a desirable state of psychological "tranquility." This resembled, in turn, Mr. Moralist's stern indifference. Despite these similarities, however, their philosophical views, interests and affiliations appear irreconcilable.

The city in our story is Elis; our timeframe, the second half of the fourth century BC and the first quarter of the third century. But Elis did not witness any heated philosophical debate. For Mr. Skeptic, Mr. Metaphysician, and Mr. Moralist are, in fact, one and

the same person, Pyrrho of Elis (c. 365–275 BC); or, more precisely, they correspond to three different portraits of a philosopher who, like Socrates, had chosen not to commit his philosophy to writing. These introductory sketches are, of course, broad-brush, and actually more than three Pyrrhos live in the pages of the scholarly literature (Reale 1981 distinguished *eight*). Even so, someone might protest that there is nothing especially exciting in this exegetical divergence, which is far from extraordinary, and not only when relatively obscure figures like Pyrrho are concerned, for whom our evidence is scant, late, and indirect. But Pyrrho is an instructive case, challenging historians of philosophy to reflect on their methodology, and on how they handle the exegetical tools at their disposal.

Pyrrho and Timon

It is only within the last thirty years that fully informed research on Pyrrho has become possible, facilitated by a complete collection of testimonies (Decleva Caizzi 1981). The conflicting character of interpretations reflects the conflict in the extant evidence, but also the liability of some key texts to competing readings. From this point of view the award goes to the testimony which scholars have identified as our best piece of evidence: Eusebius of Caesarea (third to fourth century AD) quotes verbatim (so he claims) an excerpt from the Peripatetic Aristocles of Messene (probably first century AD; Chiesara 2001) in which a short account on Pyrrho's outlook was provided on the basis of the testimony of Pyrrho's pupil Timon of Phlius (third century BC). That we salute a fourth-hand testimony (Eusebius on Aristocles on Timon on Pyrrho) as invaluable evidence might raise some eyebrows; the most acute controversy surrounding it does not arise, however, from the layering of voices, but from internal factors. Let us read the central passage:

> Pyrrho of Elis was also emphatic in such a position [sc. that it is our nature to know nothing]. Although he himself has left nothing in writing, his pupil Timon says that whoever wants to be happy must consider these three questions: (1) first, how are things by nature? (2) Second, what attitude should we adopt towards them? (3) Third, what will be the outcome for those who have this attitude? [Timon] says then that (1) he [sc. Pyrrho] declared that things (*pragmata*) are equally without difference (*adiaphora*), without stability (*astathmēta*) and without determination (*anepikrita*); for this reason (*dia touto*) neither our sensations nor our opinions tell truths (*alētheuein*) or falsehoods (*pseudesthai*). (2) For this reason (*dia touto*), then, we should not trust them one bit, but we should be without opinions (*adoxastous*), without inclinations (*aklineis*) and without wavering (*akradantous*), saying concerning each individual thing that it no more (*ou mallon*) is than is not, or both is and is not, or neither is nor is not. (3) The outcome for those who actually adopt this attitude, says Timon, will be first non-assertion (*aphasian*), and then tranquility (*ataraxian*).
>
> (Euseb. *Praep. evang.* 14.18.2–5)

The deepest controversy involves the answer which, according to Timon, Pyrrho gave to the question concerning the nature of things: they are equally *adiaphora kai astathmēta kai anepikrita*. According to two prominent alternatives, the three epithets may be read as drawing attention to something about things themselves (things are *intrinsically* "indifferent," "unstable" and "indeterminate"), or to something about our cognitive

access to things (things are "undifferentiable," "unmeasurable," and "indeterminable" *by us*). These have been called the "metaphysical" ("objective") and the "epistemological" ("subjective") readings respectively: some version of the former has been supported by, for example, Long and Sedley 1987, Hankinson 1995 and, in a more articulated way, Bett 2000; the latter has been defended by Stopper 1983, Brennan 1998, Castagnoli 2002 and Thorsrud 2009 (Svavarsson 2004 has attempted a "mixed" reading). The semantic range of the adjectives is compatible with both interpretations, although at least *anepikrita* is more naturally interpreted as carrying the epistemological import that things cannot be determined (or that, as a matter of fact, they have not been determined: verbal adjectives can carry both modal and non-modal nuances). How can we decide, then, whether Pyrrho was Mr. Metaphysician or Mr. Skeptic? The way in which the question has been handled is methodologically instructive. To begin with, it is worth stressing that for a long time this has not even been an open question: *of course* Pyrrho is Mr. Skeptic, since he was the initiator of that ancient brand of skepticism which, starting from Aenesidemus (first century BC), adopted Pyrrho as its eponymous hero: Pyrrhonism. And ancient Pyrrhonists, as Sextus Empiricus (probably second century AD) shows, were hard-nosed skeptics: far from committing themselves to any metaphysical claim, whether positive or negative, they "suspended judgment" on account of our inability to settle the conflict between the equally strong ("equipollent") appearances and reasons which can be adduced in support of or against any possible claim or belief. The default assumption has been, then, that Pyrrho was the first Pyrrhonist; even if we should not expect from him the same degree of sophistication to be found in Sextus' works almost five centuries later, the essential structure, methods, and aims of Pyrrhonean skepticism were laid down by Pyrrho. Aristocles presents Pyrrho as someone who claimed that "it is our nature to know nothing," clearly an epistemological position (although one which would have struck Sextus as negatively dogmatic).

The supporters of the metaphysical interpretation, however, do not lack weapons to fight back. They protest that facile retrojections upon Pyrrho of what we know of later Pyrrhonism are naïve and question-begging. The standards of philological and historical attention in the preservation, reconstruction, and transmission of someone else's views were more relaxed in antiquity; time and again ancient thinkers showed no qualms about foisting upon their predecessors ideas which we would consider only implicit in, and often alien to, the philosophical outlook of the ancient authority they decided to appropriate. The critics of the traditional interpretation of Pyrrho will also emphasize that, after all, even our main source on Pyrrhonian skepticism, Sextus, is cautious about Pyrrho's skeptical credentials (*Pyr.* 1.7). Another late Pyrrhonist, Theodosius, claimed that "if the movements of someone else's mind cannot be grasped, we shall never know Pyrrho's state of mind, and in ignorance of that, we shall never be able to call ourselves Pyrrhonians" (Diog. Laert. 9.70). While this is not scholarly doubt about the possibility of reconstructing what the historical Pyrrho had really said and meant, but a deeper philosophical skepticism about the knowability of other minds, the argument was marshaled within a debate on the appropriate name for the school, and led Theodosius to renounce the label "Pyrrhonians."

We cannot simply *assume*, then, that Pyrrho was a skeptic, let alone a particular kind of skeptic, given the variety of forms of skepticism which can be distinguished both theoretically and historically. Those who have identified Pyrrho as Mr. Metaphysician will explain that Aristocles' inclusion of Pyrrho in a list of pre-Aristotelian philosophers whose epistemological views made knowledge impossible is itself part of the tradition

of misrepresentations, and that some of Aristocles' own later criticisms are themselves difficult to reconcile with the epistemological interpretation (Warren 2000). They will emphasize a different aspect of Aristocles' testimony: Pyrrho's pronouncement was presented by Timon as an account of "how things are by nature." According to some interpreters, the controversy will be settled by examining carefully which reading of the triad of adjectives better fits the logic of the passage (Bett 2000: 22). For, according to them, the inference drawn immediately afterwards makes sense *only* on the metaphysical reading: that our sensations and opinions are neither true nor false does not follow from, and is inconsistent with, the epistemological claim that the nature of things is beyond our cognitive reach. On the other hand, that lack of truth-value follows directly from metaphysical indeterminacy (any determinate claim about what is in fact indeterminate will fail to be either true or false).

Before examining the merits of this move, it is worth saying a few words on the exegetical strategy underlying it. This is sometimes referred to as the "principle of charity": when we try to interpret someone's views or arguments on the basis of partial or ambiguous information, other things being equal a "charitable" interpretation which attributes to that person good (or better) views or arguments, maximizing the truth, intelligibility and rationality of what he says, should be preferred. The principle is reasonable, but easily abused. Different interpreters will have different conceptions of what counts as true, intelligible and rational. Moreover, the "other things being equal" clause is often disregarded, but is especially crucial when the interpretation at stake is the exegesis of texts and arguments belonging to a philosophical context very different from ours; our own perception of what is true, rational and intelligible cannot overshadow or substitute all the relevant information concerning that context. In fact, our perception should be informed by full appreciation of that context, since consistency is one crucial indicator of rationality, and intelligibility strongly depends on the framework of reference.

Let us now return to our argument for the metaphysical reading. I agree that the inference in (1), if taken at face value, is invalid on the epistemological reading. But is the inference so hopelessly invalid that it would be outrageous to attribute it to any clear-minded philosopher? The answer is, I suggest, less straightforward than often claimed. Moreover, there are less literal ways of understanding the consequence drawn that make the inference less problematic: Pyrrho might have meant that since the nature of things is beyond our grasp, we are *unable to tell* whether our sensations or opinions are true or false; or that the reports of our senses and our judgments cannot be considered either *trustworthy* or *deceitful* since we have no way to check them against a reality which escapes our grasp. Moreover, there is a possible emendation of the text, proposed by Zeller and more recently defended by Stopper 1983 and Brennan 1998, which would salvage the logic of the epistemological reading. Rather than relaxing the demands of charity, the supporters of the skeptical interpretation have put to good use another tool of the trade: philology. They have conjectured that the original text has been corrupted, and that the Greek words *dia to* were mis-transcribed as *dia touto*: "Pyrrho declared that things are equally without difference, without stability and without determination because (*dia to*) neither our sensations nor our opinions are reliably true or constantly false." This emendation reverses the direction of the inference: it now runs from the unreliability of our sensations and opinions to our failure to determine how things are. The hypothesis can be easily explained from a paleographic point of view, especially in light of the occurrence of *dia touto* in the following sentence; this kind of scribal error happened frequently in the transmission of Greek texts.

The availability of a reasonable epistemological reconstruction of the argument shows that the metaphysical interpretation cannot be adopted on the *sole* basis of the prima facie logical shortcomings of the epistemological reading. Furthermore, on the metaphysical reading the logic of the inference is rather puzzling. That reading attributes to Pyrrho the idea that for a certain sensation or opinion to have a truth-value, there must be some definite state of affairs verifying or falsifying it; but reality is indeterminate; for this reason our sensations and opinions are neither true *nor false*. But, on a standard correspondence view of truth, one would expect claims attributing a determinate character to something indeterminate to be false (Castagnoli 2002: 446–7). If the metaphysical party are too zealous in their demands of absolute rigorousness from Pyrrho's reasoning as summarily sketched in our fourth-hand report, then their own reading falls short of that standard.

This is a healthy reminder that such a radical and far-reaching exegetical divergence can rarely be decided exclusively on the basis of the analysis of the wording and internal logic of a single source, however valuable. It is worth noticing that in fact, on both interpretations, Pyrrho's underlying *reasons* for adopting his position remain unstated. The fact that our sensations and opinions are neither constantly correct nor constantly wrong does not entail that we cannot determine what is true and what is false. Epistemological interpreters must presuppose that, like later skeptics, Pyrrho would have used arguments to reject the commonsense view that we can learn to discriminate reliably between the true and the false reports of our senses and mind. We know that later Pyrrhonists had batteries of such arguments: their strategy was to show the ultimate lack of reasonable justifications for bestowing reliability on any piece of evidence more than on any conflicting one. But no such arguments appear in Aristocles, nor in any other source which can be taken as a faithful report of Pyrrho's original outlook. Those who make of Pyrrho a nihilist metaphysician find themselves in a similar quandary: what is supposed to be our key testimony on Pyrrho's metaphysical concerns is silent on why Pyrrho should have thought that reality is intrinsically "indeterminate." We have just seen that to fill the argumentative gap epistemological readings have tended to look forward to the later history of Hellenistic skepticism, while acknowledging the existence of pre-Hellenistic skeptical tendencies and arguments; metaphysical readings will tend, on the contrary, to look backwards, to the philosophical background which could have been the inspiration for Pyrrho's own negative metaphysics. Some interpreters have given credence to the ancient tradition (Diog. Laert. 9.69) according to which Pyrrho's philosophy was influenced by his encounter with Indian "naked wise men" (*gymnosophistai*) on his travels in the East following Alexander the Great's military campaign: although the epistemological (skepticism) or ethical and practical (ascetism) aspects of their possible influence have been stressed (Flintoff 1980; Kuzminski 2008), the idea of the insubstantiality and impermanence of reality has also been compared tentatively to Pyrrho's indeterminism (Bett 2000: 169–78). The Democritean Anaxarchus, presented as Pyrrho's teacher and friend in our sources, is also often mentioned in this respect: the idea that he "likened existing things to stage-painting and took them to be similar to the things which strike us while asleep or insane" (Sext. Emp. *Math.* 7.88), *if* taken to express a metaphysical point, would have affinities with Pyrrho's indeterminacy views.

It has also and more forcefully been suggested that the argumentative roots for Pyrrho's position should be traced back to Eleatic and Platonic metaphysics. According to Bett (2000: 118), metaphysical indeterminacy is the offspring of Pyrrho's recognition of the ubiquity of the "phenomenon of variability" wedded with his acceptance of the

"invariability condition:" "in order for an object to be a certain way *by nature*, it must be that way *invariably* or *without qualifications*. Hence something that is *F* only *in some circumstances* (but not-*F* in other circumstances), or *F* only *in certain respects* (but not-*F* in certain other respects), is thereby *not* by nature *F*"; its nature is metaphysically indeterminate. Such a conception of what is required for something really to be the case occurs in some arguments in later Pyrrhonism (Sext. Emp. *Math.* 11.69–78), and would have been influenced by Plato's conception of the sensible world, as reflected for example in the end of *Republic* book 5 and in his criticism of the Heraclitean thesis of radical flux in the *Theaetetus*. Unlike Plato, Pyrrho would have taken the Eleatic strictures to their extreme consequences, not limiting his negative metaphysical conclusions to the sensible world. To later skeptics, both outside (Academics) and within the Pyrrhonian tradition (Sextus Empiricus), the nihilistic conclusion of Mr. Metaphysician, and the invariability condition from which it springs, would appear deeply dogmatic, and thus objectionable.

Let us now return to the remainder of Aristocles' testimony. Although some details of Pyrrho's answers to Timon's second and third questions are also debatable, their philosophical kernel is less controversial. As a result of Pyrrho's diagnosis of how things are, the correct attitude is one of mistrust in our senses and opinions: we should thus be "without opinions, without inclinations and without wavering," a mental disposition which can be voiced through the formula "no more" (*ou mallon*). This formula, which had a previous philosophical history (De Lacy 1958), will become standard in later Pyrrhonism, in which it expresses the speaker's mental state of suspension of judgment (*epochē*) (Sext. Emp. *Pyr.* 1.188–91). According to the traditional skeptical interpretation, *ou mallon* has exactly the same meaning in Pyrrho, and the state recommended by Timon is nothing but a state of *epochē*, a "standstill of the intellect, owing to which we neither deny nor affirm anything" (*Pyr.* 1.10), that is, we withhold assent and belief. "Honey is no more sweet than bitter:" in the face of equipollent conflicting reasons, I suspend judgment as to whether honey is sweet or bitter (or, indeed, both sweet and bitter, as Protagoras had maintained, or neither sweet nor bitter, as Democritus had insisted). The metaphysical interpreters will ask us to understand the key concepts involved in ways consistent with metaphysical nihilism, and not, anachronistically, in light of the epistemological strategies of later Pyrrhonism. It is because of the indeterminacy of reality that we should be without opinions on how things are (except, of course, for the second-order opinion that all things are indeterminate). The formula *ou mallon* will have to be parsed accordingly: rather than expressing suspension of judgment, it will be a denial that something is to any greater extent *F* than not *F*.

Whether on metaphysical or on epistemological grounds, Pyrrho thus recommended a mental attitude radically alternative to the ordinary one, which is positive commitment to a complex set of beliefs on how things are (and should be), shaping our behavior and expectations. According to Timon, Pyrrho's inquiry about (1) the nature of things and (2) the attitude to adopt towards them had a practical goal: (3) the state in which we will find ourselves if we follow Pyrrho's teachings is one consisting of *aphasia* and *ataraxia*. The nature of *aphasia* in this context is uncertain (Brunschwig 1997): although the Greek term can mean complete silence, no evidence suggests that Pyrrho himself opted for such an extreme stance, as opposed, perhaps, to a somewhat laconic attitude, and later Pyrrhonists understood *aphasia* as the abstention from positive or negative *assertions* about reality, and not from language altogether (Sext. Emp. *Pyr.* 1.192–3). As we have seen, *ataraxia* is central to the whole Pyrrhonian outlook: it is a state of

psychological "freedom from trouble" or tranquility which is identified with happiness (*eudaimonia*) itself. The idea that *ataraxia* should be sought as the goal of human life was not new: the influence of the Democritean tradition, including Pyrrho's companion Anaxarchus, was certainly fundamental (Warren 2002). What is groundbreaking is the suggestion that *ataraxia* will result from the mental attitude of being without opinions. Our Aristoclean summary does not explain *how* tranquility is supposed to result, but other sources come to our aid. In a series of fragments from Timon's works Pyrrho is portrayed as an extraordinary creature, who discovered how "to escape the servitude to opinions (*doxai*) and the empty theorizing of the sophists" and how to "unloose the shackles of every deception and persuasion" (Diog. Laert. 9.65); he "acted most easily with calm, always heedless and uniformly undisturbed, paying no attention to the whirls of sweet-voiced wisdom" (Sext. Emp. *Math*. 11.1) and was "in windless calm" (11.141), "unconceited and unbroken by all the pressures that have subdued the famed and unfamed alike, unstable band of people, weighed down on this side and on that with the affections of opinion (*doxa*) and futile legislation" (Euseb. *Praep. evang*. 14.18.17). Opinion *itself* is depicted as a source of psychological disturbance: by liberating himself from it Pyrrho reached his condition of unique ease and tranquility. Later Pyrrhonists, who retained the connection between a life without opinions and *ataraxia*, spelled out its rationale. In his *Outlines of Pyrrhonism* Sextus Empiricus depicts the would-be Pyrrhonist as someone particularly sensitive to, and troubled by, the pervasive conflict he finds between beliefs about what is valuable or harmful, to be pursued or avoided. Coming to suspend judgment on what is true and false, good and bad is the source of liberation from the unnecessary mental stress caused by intense desires, expectations, fears, and frustrations (1.12, 1.27–9).

If Pyrrho's rationale resembled that of later Pyrrhonists, we would expect evaluative beliefs in the practical and ethical sphere to have been primary targets (Timon claimed that "desire is the first of all bad things" [Athenaeus 337A]; it is possible to read the practical nuance of freedom from desires and choices in the adjective *aklineis*, "without inclinations," in Aristocles). According to one source Pyrrho "would maintain that nothing is honorable or base, or just or unjust … for each thing is no more this than this" (Diog. Laert. 9.61). Exactly the same idea is attributed to Timon in relation to good and bad (Sext. Emp. *Math*. 11.40). If taken at face value the two passages seem to bring grist to the mill of the metaphysical reading: honorable, base, just, unjust, good, and bad are not subjected to suspension of judgment, but are declared not to be real. At the same time, however, the claim that nothing is good expresses a definite opinion about reality which is not germane to metaphysical indeterminacy.

Exactly because only practical/ethical beliefs appear to be relevant to the achievement of the goal of *ataraxia*, several interpreters have suggested that Pyrrho was, after all, neither Mr. Skeptic nor Mr. Metaphysician. He was Mr. Moralist: Pyrrho's narrow interest was ethical, and he declared "things" (*pragmata*) to be "without difference" only to the extent that they bear upon our acting (*prattein*), forming possible objects of positive or negative desire and choice (Ausland 1989; Brunschwig 1994 and 1999; Warren 2002: 86–97; Beckwith 2011). Health, wealth, social status, life itself are "indifferent": they are neither good nor bad, neither desirable nor to be avoided. This recognition will bring about tranquility by freeing us from any troubling emotional investment. I mentioned earlier an ancient portrayal of Pyrrho according to which he maintained that everything is indifferent, and virtue is the only good (Cic. *Fin*. 2.43, 3.11–12, 4.43). The second clause is difficult to reconcile with our evidence: it has been inconclusively

associated with the puzzling Timonian fragment (Sext. Emp. *Math.* 11.19–20) in which Pyrrho appears to avow knowledge of "the nature of the divine and the good" (Burnyeat 1980; Bett 1994; Svavarsson 2002; Clayman 2009), but it is safer to conjecture that Pyrrho's indifference led someone in antiquity mistakenly to associate him with the Cynicizing Stoic Aristo, who considered everything *except virtue and vice* as morally indifferent.

That liberation from anxiety-inducing opinions in the ethical and practical sphere was a key area of Pyrrho's outlook is beyond doubt, and something which both the epistemological and the metaphysical interpretations can explain. That it was the *only* area is more controversial. Aristocles' testimony is itself difficult to square with such a narrow reading, starting from the mention of the unreliability of our senses, which would be irrelevant to purely ethical concerns. Brunschwig (1994, 1999) has suggested that the Aristoclean report includes in fact more than Pyrrho's original views; noticing that Timon attributes to Pyrrho only the first part of the first answer, he has conjectured that other elements in the passage should rather be considered as additions by Timon himself, including, crucially, the problematic inference from the ethical indifference of *pragmata* to the epistemological unreliability of sensations and opinions. On this view Timon, and not Pyrrho, was the first Pyrrhonist (cf. also Warren 2002: 97–103).

Whatever the underlying motivations and the scope of his lack of opinions may have been, Pyrrho was exalted by Timon for embodying an ideal of calm and tranquility. Pyrrho's practical attitudes also emerge from a number of colorful anecdotes about his behavior and activities, most of which are preserved in Diogenes Laertius' life of Pyrrho in Book 9. Although it would be naïve to take these stories to convey reliable historical information, if used judiciously they can become sources of corroboration or illustration of what we learn independently from theoretical accounts like Aristocles'. Even when they sound like fabrications, the anecdotes show "in action" the practical consequences of Pyrrho's outlook, at least as perceived by those who created the stories. In some cases, however, one wonders whether they betray an unsympathetic attitude. Various anecdotes illustrate how Pyrrho was "always in the same state," and displayed utter "indifference" (*adiaphoria*) in all situations: for example, he would continue speaking after his interlocutor had left in the middle of his speech, and once he did not even stop when he saw Anaxarchus lying in a ditch—and was later praised by Anaxarchus himself for this display of indifference (Diog. Laert. 9.63). Others portray Pyrrho's disregard for social conventions: he would withdraw from his family and leave the city without warning, wandering around like a vagrant (9.63), and with "indifference" he would engage in housework which would have appeared inappropriate for a man of his social standing, including washing a pig or taking poultry and piglets to the market (9.66). Other anecdotes stress Pyrrho's lack of susceptibility to common emotional reactions: he remained calm on a ship during a storm, pointing at a piglet serenely eating its food as a model of *ataraxia* (Diog. Laert. 9.68; Plut. *De prof. virt.* 82E–F); not even in the face of extreme physical pain did he frown (9.67), thus displaying an impassibility (*apatheia*) which goes beyond the psychological tranquillity supposedly induced by lack of opinions. (Later Pyrrhonists claim that "moderation" (*metriopatheia*) in affections like cold, hunger, and pain, and not utter impassibility, is a Pyrrhonian goal: Sext. Emp. *Pyr.* 1.25, 29–30.) Even when he failed to live by his own standards, he would acknowledge his weakness, thus reiterating the ideal attitude: "when he was once scared by a dog that set on him, he responded to criticism by saying that it was difficult to strip oneself completely of being human" (Diog. Laert. 9.68; cf. Euseb. *Praep. evang.* 14.18.26).

All in all, our anecdotal information is consistent with the theory outlined in Aristocles: someone who has no opinions on how things are, and especially on what is good or bad, honorable or disgraceful, will not be concerned in the least about what is socially sanctioned, and will not fear pain, injury or even death. That consistency is not surprising, given the declared practical goal of Pyrrho's philosophy; no doubt the eccentricity of Pyrrho's behavior is supposed to be the natural outward manifestation of his frame of mind. Whether that kind of (admittedly superhuman) detachment is really *desirable* is a philosophical question that cannot be tackled here (Striker 1990; Warren 2002: 116–21). Whether such a state of mind is psychologically even *possible* has also been debated; but it is the practical livability of such a position that was especially scrutinized in antiquity. From this point of view Antigonus of Carystus' portrayal of Pyrrho as someone who would take no precaution whatsoever in the face of precipices, oncoming carts and dangerous dogs, thus constantly needing to be rescued by the friends who followed him around (Diog. Laert. 9.62), is especially interesting. The story has typically been discarded as a hostile fabrication, foisting upon Pyrrho the self-destructive behavior, which someone who held his position would have to display, *according to his critics*, in order to live consistently with that position (Bett 2000: 68). That skepticism and other similarly unorthodox philosophical stances should lead to *apraxia* ("inaction"), in the form of either vegetable-style paralysis or random, crazy or self-destructive behavior was a standard criticism in antiquity (Vogt 2010), rooted in Aristotle's seminal attack against the deniers of the Principle of Non-contradiction in *Metaphysics* Γ (Long 1981). The targets of this criticism devised a variety of strategies to defend the livability of their position. Later Pyrrhonists made "appearances" (*phainomena*) their "criterion of action": while suspending judgment on whether things are as they appear to be, they noncommittally "went along with" appearances in their day-by-day life, thus living an outwardly ordinary existence despite their completely alternative frame of mind (Sext. Emp. *Pyr.* 1.21–4). Timon claimed that actually Pyrrho "did not depart from normal practice" (Diog. Laert. 9.105); Aenesidemus later maintained that "although he practiced philosophy on the principles of suspension of judgment, he [sc. Pyrrho] did not act carelessly in the details of daily life" (9.62). The report that Pyrrho was so admired in Elis that it was decreed that philosophers be exempted from taxes (9.64) is difficult to reconcile with the most eccentric behavior depicted in other anecdotes, but could itself be part of Timon's apologetics. Some references by Timon to the great strength of appearances and to the fact that we should acknowledge how things appear (9.105) have been used as evidence that Pyrrho himself adopted *phainomena* as a guide for choice and action. This reading could be doubted, once again, as an anachronistic retrojection of a later Pyrrhonian maneuver, starting with Aenesidemus himself (9.106). But the hypothesis that Pyrrho did make a qualified use of appearances need not force us to dismiss Antigonus' testimony completely. Pyrrho could have adopted his most extreme attitude only occasionally, as a memorable "trial of strength" against those critics who protested that he could not live his philosophy, and his adoption of *phainomena* as a practical guidance betrayed strong attachment to health and life (and some trust in the appearances themselves). But Pyrrho would not have been committed to display that daredevil attitude constantly (he lived to be nearly ninety): as another anecdote suggests, "Pyrrho used to claim that there is no difference between life and death. Someone told him: 'Why don't you die then?' 'Because', he answered, 'there is no difference'" (Stob. *Anth.* 4.53.28). What the eccentricity of Pyrrho's behavior, unless completely discounted as malicious fabrication, suggests is that, even if he typically followed appearances, social norms and

conventions were not included among *phainomena*, unlike in later Pyrrhonism (Sext. Emp. *Pyr*. 1.23–4).

It is indisputable that Pyrrho's philosophical outlook was at the same time a way of thinking and living, meant to have a radical impact upon the human mind and life. Although some scholars have tended to emphasize the theoretical and epistemological dimension of later Pyrrhonism, this practical and "therapeutic" dimension will remain central throughout. As we have seen it was Pyrrho's attitude that was singled out as extraordinary by Timon (ca. 325–235 BC). Timon also polemically attacked and satirized a number of earlier and contemporary philosophers for their pretentiousness and contentiousness (cf. Euseb. *Praep. evang.* 14.18.28: "human windbags, stuffed with empty conceit"). Other philosophers (especially Xenophanes, the Eleatics and Democritus) were treated more sympathetically, and analysis of the reasons adduced or insinuated by Timon for his unequivocal condemnations or qualified appreciations can provide indirect evidence about Pyrrho's position. Given the fragmentary status and the literary nature of our evidence, however, the operation is delicate, and these reasons cannot be simply read off the texts: the interpretation of Timon's fragments will end up being influenced by a scholar's own pre-established views on Pyrrho's thought and its philosophical pedigree. How dangerous this hermeneutic circularity is must be judged case by case.

Timon's writings were the main, if not the only, source of information on Pyrrho for later biographers and philosophers. As we have seen, it is debated whether Timon limited himself to advertising the views of his master and placing them within the philosophical tradition, or innovated in substantial ways (cf. Brunschwig 1994; for Timon's works and thought cf. Long 1978; Di Marco 1989; Clayman 2009).

Aenesidemus

Not only did Pyrrho not leave anything in writing; unlike many other philosophers who flourished at the dawn of the Hellenistic age, he did not found a school. Although later doxographers tried to reconstruct a succession of figures linking the two phases of the tradition (Diog. Laert. 9.116), for us the history of Pyrrhonism lapses after Timon's death and resumes only in the first century BC, when Aenesidemus of Cnossos (whose precise dates are unknown) appropriated, revived, and somehow reshaped the ideas and attitudes of Pyrrho and Timon, initiating a new brand of skepticism that he baptized after Pyrrho. This was in reaction to what Aenesidemus took to be contemporary forms of positive (for example, Stoic) and negative (for example, Academic) "dogmatism." According to the scholarly consensus, Aenesidemus was himself a member of the Academy before defecting (but cf. Polito 2004) and founded his school in reaction to the slackening of skepticism under the two leading first century BC figures, Philo of Larissa and Antiochus of Ascalon.

While the divergence of the interpretations of Aenesidemus is not as wide as for Pyrrho, he raises analogous methodological issues. In light of the relatively scant information available, one common approach has been that of refraining from disentangling Aenesidemus' own position from the whole later Pyrrhonian (or "Neo-Pyrrhonian") tradition which he initiated. Few interpreters have gone so far as to take it for granted that later Pyrrhonism was monolithic, and that almost everything we find in Sextus Empiricus (second century AD) can be assumed to have been already in Aenesidemus. Most interpreters have focused on those contributions that are more distinctively

Aenesideman, especially on the basis of the evidence provided by Photius' late (ninth century AD) summary of Aenesidemus' *Pyrrhonian Discourses* and by several passages in Book 9 of Diogenes Laertius and in Sextus' works.

1. A decidedly polemical focus against the Academics can be traced in our sources: their position is singled out from the beginning of Aenesidemus' *Pyrrhonian Discourses* as the foil against which to define a genuinely skeptical attitude (Sextus will also include various Academics in his list of "neighboring" philosophies not to be conflated with Pyrrhonian skepticism; *Pyr.* 1.220–35). The Academics are barely disguised dogmatists: far from suspending judgment about everything, they have all kinds of opinions, affirming certain things (for example, that something is persuasive) and denying others (for example, "nothing can be known"). Contemporary Academics are actually "Stoics fighting against Stoics" (Phot. *Bibl.* 212.169b36–170a17, Migne). This polemical thrust probably had "political" roots: Aenesidemus might have defected from the Academy, and certainly he placed his school in competition with it. Aenesidemus also took a position on whether Plato was a skeptic; unfortunately textual corruption in our source (Sext. Emp. *Pyr.* 1.222) makes that position controversial (Spinelli 2000).
2. Aenesidemus' so-called "Heracliteanism" is a more puzzling aspect of his thought, and as such has attracted ample scholarly attention (Polito 2004; Pérez-Jean 2005; Schofield 2007). Sextus reports, reproachfully, that "Aenesidemus and his followers said that the skeptical way is a road which leads to Heraclitean philosophy" (*Pyr.* 1.210); on a few occasions he also mysteriously attributes dogmatic views to "Aenesidemus according to Heraclitus." Although these testimonies have been taken to suggest the existence of a Heraclitean phase in Aenesidemus' thought, the interest in the Presocratic philosopher is more likely to have been instrumental: the Stoics had appropriated Heraclitus as a precursor, and Aenesidemus could have engaged in Heraclitean *exegesis* to show that their interpretation was tendentious, that un-Stoic consequences actually followed from his doctrines, and perhaps that Heracliteanism had more affinities with Pyrrhonism than with Stoicism.
3. The "invention" or compilation of the ten "modes" (*tropoi*) of suspension of judgment, which form the backbone of the skeptical argumentative strategies along with the five modes later introduced by Agrippa, is Aenesidemus' most famous contribution to the history of Western skepticism (Striker 1983; Annas and Barnes 1985). A large number of conflicting appearances, observations and beliefs were arranged into ten broad groups. The material often derived from the previous philosophical tradition, but Aenesidemus had the merit of systematizing its collection and putting it to a specific use within his skeptical project.
4. Aenesidemus argued extensively against theories of causation, and introduced eight "causal modes" specifically tailored to refute any possible causal explanation (*aitiologia*) adduced by the dogmatists (Sext. Emp. *Pyr.* 1.180–5; cf. Barnes 1983).

Besides these distinctive contributions, most interpreters have presupposed that we should attribute to Aenesidemus essentially the same form of skepticism as Sextus'. This approach would seem to be justified by those testimonies according to which Aenesidemus "determined absolutely nothing, not even this very claim, that nothing is determined" (Phot. *Bibl.* 212.170a11–14, Migne); applying the formula "no more" to everything, he suspended judgment, having realized that "there is no firm basis of cognition,"

presumably as the result of his "collection of appearances, or ideas of any kind" which are "brought into confrontation with each other and, when compared, are found to present much disparity (*anōmalia*) and confusion (*tarachē*)" (Diog. Laert. 9.78). From *epochē* (the term, which probably had never been used by Pyrrho, was central within Academic skepticism), a happy state of tranquility (*ataraxia*) will follow "like a shadow," while appearances (*phainomena*) will serve as the criterion of action (their scope probably included conventions and social norms (9.107); Aenesidemus defended a "normalizing" account of Pyrrho's behavior). No source reports Aenesidemus' *reasons* for maintaining that the conflict of appearances, views and reasons should produce *epochē*. The idea that it is not decidable (or, at least, has not been decided) because of equipollence (*isostheneia*), which is pivotal in Sextus (*Pyr.* 1.8–10), has traditionally been imported into the equation.

An alternative interpretation has recently gained currency on the basis of the rejection of this explanation. Woodruff (1988) and Bett (2000: 189–222) have maintained that Aenesidemus' arguments did not aim to induce *epochē* on the basis of undecidable equipollence; they were meant to establish, for any object *x* and predicate *F*, the "aporetic" negative conclusion that *x* is not "by nature" *F* on the basis of an "invariability condition" equivalent to the one endorsed by Pyrrho according to some metaphysical interpreters. For an object to be a certain definite way by nature, it should be that way *invariably* or without *qualifications*. Hence something that manifests itself as *F* only to some people (but not to others), or only in some circumstances (but not in others), or only in certain respects (but not in others), cannot be *F* by nature. In virtue of this principle and of the widespread conflict and variability catalogued in the ten modes, Aenesidemus concluded that not only should we refrain from making positive dogmatic claims determining how things are, but we should *deny* that anything is by nature any particular way. Aenesidemus' "aporetic" claims had as their counterpart a form of relativism: he allowed relativized claims such as "*x* is *F* at time *t*," "*x* is *F* for *y*," or "*x* is *F* in circumstances C" which, exactly because relative (or "ambiguous"), do not purport to determine the intrinsic nature of things (Phot. *Bibl.* 212.169b38–170a11, Migne). Such claims would have qualified in Aenesidemus' own terms as assertions about appearances, and would have been allowed as objects of non-dogmatic belief.

This revisionary interpretation was prompted by the observation that, in several reports of views and arguments which are directly attributed to Aenesidemus or could have an Aenesideman pedigree (for example, Sextus' *Against the Ethicists*: cf. Bett 1997), we find unqualified negative conclusions (for example, signs do not exist at all [Phot. *Bibl.* 212.170b12–14, Migne]; nothing is good or bad by nature [Sext. Emp. *Math.* 11.71]) and apparent formulations of the invariability condition (for example, *Math.* 8.8: "Aenesidemus says that … the things that appear in common to everyone are true, while the ones not like this are false" (11.69–71)). These occurrences are insufficient, however, to establish that there must have been an early phase of "aporetic" Pyrrhonism distinct from Sextan "ephectic" ("suspensive") Pyrrhonism. In Sextus' works there are plenty of cases in which the context unequivocally shows that *epochē* is the goal, but Sextus limits himself to providing only evidence and arguments for the negative conclusion that something is not the case or does not exist, typically because the equipollent positive evidence and arguments require no rehearsing, since they represent the default commonsense or philosophical position. That sources like Photius could have misinterpreted these typical Pyrrhonian strategies is not implausible. As for the invariability condition, we can conjecture that Aenesidemus used it only *dialectically*, to establish a negative anti-dogmatic conclusion starting from a dogmatic principle to which the

Pyrrhonists themselves had no commitment, following, again, a pervasive argumentative strategy of later Pyrrhonism (Thorsrud 2009: 102–122; Hankinson 2010).

If not imposed by our evidence, is the "aporetic" reading of Aenesidemus at least consistent with it? Something problematic to account for is Aenesidemus' attitude towards contemporary Academics: how could he criticize them for making negative and positive claims, and then adopt a position which, on the basis of positive adherence to a dogmatic principle with Platonic pedigree, committed him to negative conclusions? One could also object, from the point of view of internal consistency, that the stress on Aenesidemus' relativistic tendencies is difficult to reconcile with the therapeutic vocation of Pyrrhonism as a route to *ataraxia*. If Pyrrhonian arguments conclude that nothing is good or bad in its own nature, while admitting that things can be correctly judged to be good or bad in relation to certain individuals, at certain times and in certain circumstances, then the disturbing psychological effects of the belief that certain things are good or bad by nature will be replaced by the no less disturbing effects of the belief that certain things are good or bad *for me, at this time* and *in my present circumstances*.

Conclusion

No satisfactory reconstruction of Pyrrho's and Aenesidemus' thought can sidestep the question of whether and how it makes sense of the Pyrrhonian tradition *as a whole*. From this perspective, the burden of proof rests on the metaphysical interpretation of Pyrrho and the aporetic interpretation of Aenesidemus more heavily than on the skeptical interpretations. While it is true that in our sources Pyrrho is never attacked as a skeptic by Hellenistic dogmatists such as Epicureans and Stoics, this argument from silence appears less urgent than the objection that Pyrrho as Mr. Metaphysician has little in common with what is supposed to be his tradition, at least as represented to us by Sextus Empiricus. For someone who believes that Aenesidemus was himself a Sextan-style skeptic the challenge is then to explain why he appropriated the obscure Pyrrho in the first place.

The coordination of the metaphysical Pyrrho with the aporetic Aenesidemus offers a way out of the impasse: their philosophical core is identical, despite the fact that the consequence of the invariability condition is cashed out in one case as a claim of indeterminacy of reality, in the other as a series of denials concerning how things are by nature. But while Aenesidemus' adoption of Pyrrho as a figurehead becomes easy to explain, the transition from Aenesidemus to Sextus becomes almost intractable. According to Bett 2000, it was originated by dropping Aenesidemus' invariability condition. It is clear why a Sextan-style Pyrrhonist should have rejected as intolerably dogmatic that condition and its consequences: it is harder to imagine how he could have thought to belong to the same school as someone who had made that condition the pivot of his philosophy. The aporetic Aenesidemus would have deserved (like the metaphysical Pyrrho) a place in the list of philosophers whom Sextus discards as bona fide skeptics. The aporetic reading also requires us to postulate that Aenesidemus understood and used most of the key Pyrrhonian concepts and terminology differently from Sextus. *Epochē* cannot be a "standstill of the intellect, owing to which we *neither deny* nor affirm anything" (Sext. Emp. *Pyr.* 1.10): consequently, all the skeptical slogans must carry different meanings than in Sextus (Bett 2000: 198–9). As we have seen, the concept of equipollence would have been extraneous to Aenesidemus' strategy (just as to Pyrrho's on the metaphysical reading), but the suggestion that this key concept might have been such a late addition is perplexing, and possibly contradicted by the Anonymous commentary on

Plato's *Theaetetus* (61.26–30), whose dating is uncertain, but possibly not much later than Aenesidemus. The ten modes of suspension would themselves have had different functions and conclusions in Aenesidemus and Sextus. It has been suggested that the aporetic reading dovetails neatly with the moderate or "urbane" reading of the scope of Sextus' skepticism (Hankinson 2010: 110), but this too is only partially correct. The two agree on the target of the skeptical arguments, that is, dogmatic declarations about the non-evident nature of things, but not on the attitude towards them: the aporetic Aenesidemus resolutely "refutes" the claim that *x* is *F* by nature, while the "urbane" Sextus (cf. Burnyeat and Frede 1997) suspends judgment on the same claim.

That such radical changes may have occurred within the late Pyrrhonian tradition, despite our lack of any ancient record, is not impossible, but appears implausible. Someone might object, however, that this impression is the result of our weighing plausibility anachronistically, on the basis of our own standards and expectations. As I have mentioned, the ancients were much more flexible than we tend to be in their way of handling and appropriating philosophical antecedents, emphasizing continuity and smoothing or passing over differences within those traditions they constructed for themselves or others. From this point of view, the shared core insight that happiness will come from abandoning any positive belief (and not—as many other philosophers had thought—from knowledge of reality) could perhaps explain why Aenesidemus looked back at Pyrrho, and why Sextus was comfortable calling himself not only a "skeptic," but also a "'Pyrrhonist."

References and further reading

The standard edition of the testimonies on Pyrrho, with Italian translation and commentary, is Decleva Caizzi 1981. Timon's fragments and testimonies are edited in Diels 1901: 173–206; the fragments from the *Silloi* (with Italian translation and commentary) are also collected in Di Marco 1989. A selection of key texts on early Pyrrhonism appears in Long and Sedley 1987 (translations and commentaries in vol. 1, Greek texts in vol. 2), sects. 1–2 (Pyrrho), sect. 3 (Timon), sects.71–2 (Aenesidemus). The Greek text and English translation of book 9 of Diogenes Laertius' *Lives of Eminent Philosophers* (9.61–116), a fundamental source on Pyrrho, Timon, and Pyrrhonism, are contained in vol. 2 of Hicks 1931.

Annas, J. and Barnes, J. (1985) *The Modes of Scepticism: Ancient Texts and Modern Interpretations*, Cambridge: Cambridge University Press.

Ausland, H. (1989) "On the Moral Origin of the Pyrrhonian Philosophy," *Elenchos* 10: 359–434.

Barnes, J. (1983) "Ancient Skepticism and Causation," in M. Burnyeat (ed.) *The Skeptical Tradition*, Berkeley, CA: University of California Press: 149–203.

——. (1992) "Diogenes Laertius IX 61–116: The Philosophy of Pyrrhonism," in *Aufstieg und Niedergang der Römischen Welt II*, 36.6, Berlin and New York: de Gruyter: 4241–301.

Beckwith, C. I. (2011) "Pyrrho's Logic: A Re-examination of Aristocles' Record of Timon's Account," *Elenchos* 23: 287–327.

Bett, R. (1994) "What Did Pyrrho Think About 'The Nature of the Divine and the Good'?," *Phronesis* 39: 303–37.

——. (1997) *Sextus Empiricus: Against the Ethicists* (Adversus Mathematicos XI), Oxford: Oxford University Press.

——. (2000) *Pyrrho, His Antecedents, and His Legacy*, Oxford and New York: Oxford University Press.

Brennan, T. (1998), "Pyrrho on the Criterion," *Ancient Philosophy* 18: 417–34.

Brunschwig, J. (1994) "Once Again on Eusebius on Aristocles on Timon on Pyrrho," in his *Papers in Hellenistic Philosophy*, Cambridge: Cambridge University Press: 190–211.

——. (1997) "L'aphasie pyrrhonienne," in C. Lévy and L. Pernot (eds.), *Dire l'évidence (Philosophie et rhétorique antiques)*, Paris: L'Harmattan: 297–320.

——. (1999) "Pyrrho," in K. Algra, J. Barnes, J. Mansfeld, and M. Schofield (eds.) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press: 241–251.

Burnyeat, M. (1980) "Tranquillity Without a Stop: Timon, Frag. 68," *Classical Quarterly* 30: 86–93.

Burnyeat, M. and Frede, M. (eds.) (1997) *The Original Skeptics*, Indianapolis and Cambridge, MA: Hackett.
Castagnoli, L. (2002) "Review of Bett 2000," *Ancient Philosophy* 22: 443–57.
Chiesara, M. L. (2001) *Aristocles of Messene: Testimonia and Fragments*, Oxford: Oxford University Press.
Clayman, D. L. (2009) *Timon of Phlius: Pyrrhonism into Poetry*, Berlin and New York: de Gruyter.
Decleva Caizzi, F. (1981) *Pirrone: Testimonianze*, Naples: Bibliopolis.
De Lacy, P. (1958) "*Ou mallon* and the Antecedents of Ancient Scepticism," *Phronesis* 3: 59–71.
Diels, H. (1901) *Poetarum Philosophorum Fragmenta*, Berlin: Weidmann.
Di Marco, M. (1989) *Timone di Fliunte:Silli*, Rome: Edizioni dell'Ateneo.
Flintoff, E. (1980) "Pyrrho and India," *Phronesis* 25: 88–108.
Hankinson, R. J. (1995) *The Sceptics*, London and New York: Routledge.
——. (2010) "Aenesidemus and the Rebirth of Pyrrhonism," in R. Bett (ed.) *The Cambridge Companion to Ancient Scepticism*, Cambridge: Cambridge University Press: 105–19.
Hicks, R. (ed. and trans.) (1931) *Diogenes Laertius: Lives of Eminent Philosophers* (Loeb Classical Library), 2nd edn., 2 vols. Cambridge, MA: Harvard University Press.
Kuzminski, A. (2008) *Pyrrhonism: How the Ancient Greeks Reinvented Buddhism*, Plymouth, MA: Lexington Books.
Long, A. A. (1978) "Timon of Phlius: Pyrhronist and Satirist," *Proceedings of the Cambridge Philological Society* 204: 68–91. [Reprinted with revisions in A. A. Long (2006) *From Epicurus to Epictetus: Studies in Hellenistic and Roman Philosophy*, Oxford: Clarendon Press: 70–95.]
——. (1981) "Aristotle and the History of Greek Scepticism," in D. J. O'Meara (ed.) *Studies in Aristotle*, Washington, DC: Catholic University of America Press: 79–106. [Reprinted with revisions in Long, A. A. (2006) *From Epicurus to Epictetus: Studies in Hellenistic and Roman Philosophy*, Oxford: Clarendon Press: 44–69.]
Long, A. A. and Sedley, D. N. (1987) *The Hellenistic Philosophers*, 2 vols. Cambridge: Cambridge University Press.
Migne, J. P. (1860) *Patrologia Graeca*, vol. ciii, Paris: Petit-Montrouge.
Pérez-Jean, B. (2005) *Dogmatisme et scepticisme: L'héraclitisme d'Énésidème*, Lille: Septentrion.
Polito, R. (2004) *The Sceptical Road: Aenesidemus' Appropriation of Heraclitus*, Leiden and Boston: Brill.
Reale, G. (1981) "Ipotesi per una rilettura della filosofia di Pirrone di Elide," in G. Giannantoni (ed.) *Lo scetticismo antico*, 2 vols, Naples: Bibliopolis: 245–336.
Schofield, M. (2007) "Aenesidemus: Pyrrhonist and Heraclitean," in A. M. Ioppolo and D. Sedley (eds.) *Pyrrhonists, Patricians and Platonizers: Hellenistic Philosophy in the Period 155–86* BC, Naples: Bibliopolis: 271–338.
Spinelli, E. (2000) "Sextus Empiricus, the Neighbouring Philosophies and the Sceptical Tradition," in J. Sihvola (ed.) *Ancient Scepticism and the Sceptical Tradition* (*Acta Philosophica Fennica* 66), Helsinki: The Philosophical Society of Finland: 35–61.
Stopper, M. R. (1983) "Schizzi Pirroniani," *Phronesis* 28: 265–97.
Striker, G. (1983) "The Ten Tropes of Aenesidemus," in M. Burnyeat (ed.) *The Skeptical Tradition*, Berkeley and Los Angeles, CA: University of California Press: 95–115.
——. (1990) "*Ataraxia*: Happiness as Tranquillity," *Monist* 73: 97–110. [Reprinted in G. Striker (1996) *Essays in Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press: 183–95].
Svavarsson, S. H. (2002) "Pyrrho's Dogmatic Nature," *Classical Quarterly* 52: 248–56.
——. (2004) "Pyrrho's Undecidable Nature," *Oxford Studies in Ancient Philosophy* 27: 249–95.
Thorsrud, H. (2009) *Ancient Scepticism*, Stocksfield: Acumen Press.
Vogt, K. (2010) "Scepticism and Action," in R. Bett (ed.) *The Cambridge Companion to Ancient Scepticism*, Cambridge: Cambridge University Press: 165–80.
Warren, J. (2000) "Aristocles' Refutations of Pyrrhonism (Eus. *PE* 14.18.1–10)," *Proceedings of the Cambridge Philological Society* 46: 140–64.
——. (2002) *Epicurus and Democritean Ethics: An Archaeology of Ataraxia*, Cambridge: Cambridge University Press.
Woodruff, P. (1988) "Aporetic Pyrrhronism," *Oxford Studies in Ancient Philosophy* 6: 139–68.

Related chapters

34. The Hellenistic Academy
41. Sextus Empiricus

36
THE PERIPATETICS AFTER ARISTOTLE

Han Baltussen

The story of the early Peripatos is to a large extent the story of Aristotle and how his ideas become studied, expanded and adapted. This chapter presents a highly selective discussion of Aristotle's thought as seen "through the eyes" of the next generations. It is very important to realize that the early successors did *not* regard the works of their master as a fixed and complete body of work, that is, a canon (Sharples 2010a). The successors of Aristotle, later referred to as *Peripatētikoi* (Diog. Laert. 1.17; Plutarch *Sulla* 26.2.2), were left with the daunting task of keeping up an unprecedented range of research activities which Aristotle's pioneering research had bequeathed to the world. This dependence on the master's treatises has often led to the negative view that their attitude was purely "reactive," implying that their work is derivative and, for that reason alone, inferior. But such a verdict is both unhistorical and unhelpful. Crucial to a proper understanding of, for instance, Theophrastus, the second head of the Peripatos, is the fact that he deliberately trades on the presence of the Aristotelian corpus. This was already recognized in antiquity:

> Theophrastus, as is his custom in other works as well, when he is dealing with matters similar to those which have been dealt with by Aristotle … touches lightly on those matters which he knows have been said by Aristotle earlier, but follows up more diligently other things not dealt with by Aristotle
> (F 72A FHSG = Boethius *in de interpretatione* 1 Introd.).

His work is thus a responsible continuation and extension of Aristotle's, not a mere by-product. In other words, building on their master's work was a sensible thing to do for the successors, while their additions and corrections were useful and necessary to improve the overall system. The immediate result is that we cannot expect that a simple narrative will emerge of the philosophical knowledge we now call "Peripatetic" (a collective noun with many meanings). Fortunately, over the past three decades new editions and analyses of the fragmentary remains of Aristotle's successors (see also Sources below, in this chapter) and the translations of long-neglected Arabic and Syriac texts have led to a more nuanced view. My aim, then, is to discuss the early Peripatos and its most significant members—in particular those who had known Aristotle personally (see Figure 36.1)—to clarify the dynamics between Aristotle and his heirs in the light of this new material. Some general historical comments on the Peripatos will assist in

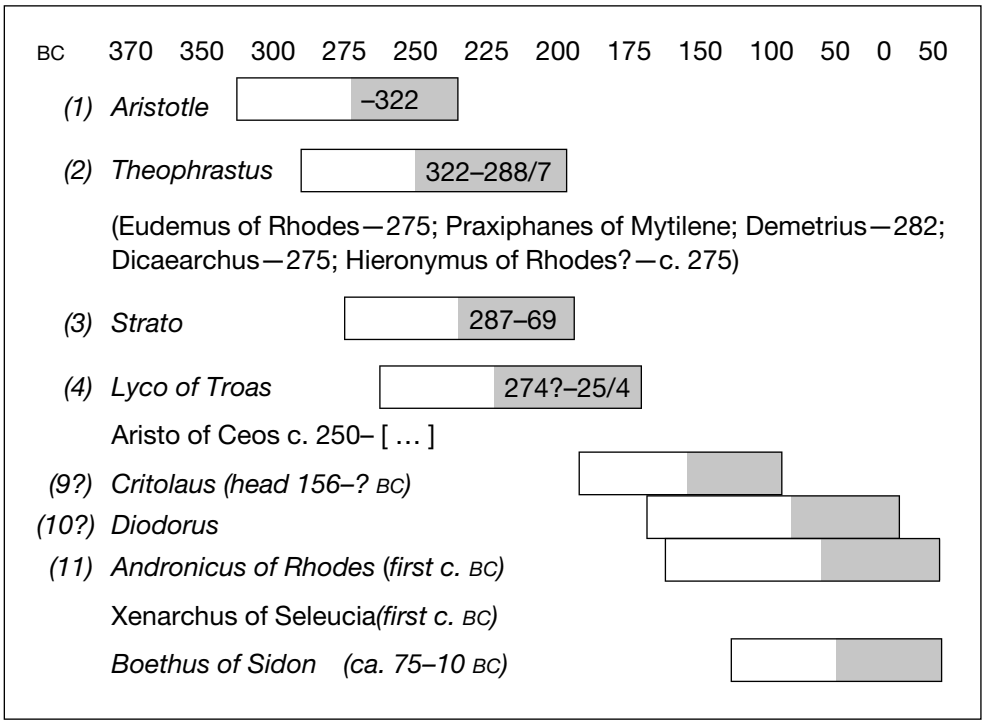

BC 370 350 300 275 250 225 200 175 150 100 50 0 50
(1) Aristotle –322
(2) Theophrastus 322–288/7
(Eudemus of Rhodes—275; Praxiphanes of Mytilene; Demetrius—282; Dicaearchus—275; Hieronymus of Rhodes?—c. 275)
(3) Strato 287–69
(4) Lyco of Troas 274?–25/4
Aristo of Ceos c. 250– […]
(9?) Critolaus (head 156–? BC)
(10?) Diodorus
(11) Andronicus of Rhodes (first c. BC)
Xenarchus of Seleucia(first c. BC)
Boethus of Sidon (ca. 75–10 BC)

Figure 36.1 Tentative chronology of well-known Peripatetic scholarchs (tenure given in shaded area)

getting a sense of its development down to 100 BC. Its next phase cannot be covered here (but see Gottschalk 1987, Sharples 2010a and Reinhardt, ch. 37, in this volume).

Several factors make a study of the Peripatos challenging. The primary one, how to evaluate modern scholarly judgment (mentioned above) and the incomplete ancient evidence, are intertwined. The standard account of the school since the nineteenth century tells of a rapid decline into insignificance after Theophrastus, who followed his master "anxiously" (Zeller 1895, Wehrli 1983). In fact, even the ancients believed that at least the post-Theophrastean Peripatos never again reached the level of its early years (Brink 1940: 914, perhaps thinking of Cic. *Fin.* 5.13). This oft-repeated verdict no doubt has a kernel of truth, but it seems based on the (flawed) assumption that we can simply measure the successors against their master, as if they could rewrite the history of ideas from scratch. In addition, the incomplete and fragmented evidence causes serious problems for a balanced assessment, as sources are often late and require proper study in context (Baltussen 2002: 148–9). The alternative explanation, a "decline" due to Aristotle's works being lost, is doubtful, since they were probably not all lost (Gottschalk 1987: 1084, 1087–88), and only recently the problematic and contradictory nature of the evidence concerning the corpus' fate has been usefully qualified with a new hypothesis (Primavesi 2007): the main testimonia speak of the works being hidden in a ditch or cellar (Strabo, Plutarch, Athenaeus), and being badly damaged. The new proposal, not dependent on interpreting conflicting claims of ancient authors about where the books went or whether all were taken out of Athens by Neleus (as stated in Strabo 13.608),

uses the counting systems of the two main lists of the works to show that some works were added at a later date from another list. This is of interest because it shows in a more objective way how the corpus was transmitted.

Aristotle's impact on centuries to come is undoubtedly based on his pioneering and original work, but whether the disparaging attitude towards his successors is fully justified is debatable: first, he clearly was a towering figure—much like Newton or Einstein were in modern physics. Comparison with such figures is invidious and misplaced. Second, because the evidence for the work of his successors is incomplete or lost, we have to steer clear of either a too fragmented picture (inconclusive) or an overly systematic one (overconfident and prone to distortion). So it will be advisable to keep the general qualifier "in so far as the evidence allows" at the back of our minds throughout this chapter.

Roughly three stages can be distinguished in the school's history. Consolidation and refinement were the concern of the immediate successors (those who knew Aristotle personally), and individual responses to the school founder were both critical and expansive (Brink 1940: 917, Steinmetz 1964, Gottschalk 1987). Standard accounts fail to appreciate the importance of this approach. Refinement of Aristotle's large-scale constructs transpires from the clear attempts to fill gaps, correct his arguments or test them against new evidence; all this in order to establish a comprehensive and complete system out of his foundational (but often sketchy) discussions. A second stage is the "revival," in the first century BC, helped by new editorial work on Aristotle's corpus—also implying that the school experienced a slump during the late third and early second centuries (Sharples 2010a: ch. 2). The revival came with the move of Greek philosophy to Rome (famously starting with an embassy in 155 BC; see also Reinhardt, ch. 37 in this volume) and when Sulla brought Aristotle's library to Rome (between 86 and 82 BC), leading to an "edition" by Andronicus of Rhodes between 40–20 BC (it was used by Cicero, *Letter to Atticus* 4.10.1). This inaugurated the third stage, that of commentary *on* Aristotle, confirming that philosophy now started from *texts*. It is best represented by the works of Aspasius, the first known commentator (100–150 AD), and Alexander of Aphrodisias, the best known (c. 200 AD).

The chronology of the school and its members cannot be fully reconstructed: there are in fact different lists of successors, none of them complete (Brink 1940: 908–14). We have to work with an approximate, relative chronology, based on available biographical information. Peripatetics can be active outside the school (Brink 1940: 916), and the evidence makes it sometimes hard to determine who was a real Peripatetic (Schorn 2003). Political circumstances in Athens were not always favourable: the link to the Macedonian court (Philip had invited Aristotle to be his son's tutor in 342 BC, as Diog. Laert. 5.10 reports) would continue to influence the fate of the school for some time; for example, in 306 BC the school had to close for one year due to political tensions and Theophrastus was temporarliy exiled (Grayeff 1978: 49).

It is probably true that after Aristotle the full scope of his studies was never again completely covered by one individual successor, except perhaps by Theophrastus who came close, as the list of his works indicates (Diog. Laert. 5.42–50). His ancient reputation as "the most distinguished" among Aristotle's many pupils and as having "remarkable intelligence and industry" confirms this (at Diog. Laert. 5.39 Aristotle himself is said to concur). But the same source presents almost matching praise of Demetrius (ibid. 5.80: "In number of works and their total length he has surpassed almost all contemporary Peripatetics. In learning and versatility he has no equal"), so that the "decline" thesis of the school cannot stand without qualification.

School activity consisted of lectures for the advanced students during mornings and public talks in the afternoon (Diog. Laert. 5.1). The two types of writings we know about correspond to these: those that were more specialized for a small circle (called *esoteric*)—most of Aristotle's extant works are of this category—and those for a general public (called *exoteric*). In addition, legally only Athenians could own a piece of land, so that many philosophers were not entitled to private property, since many were considered "immigrants" (*metics*, see esp. Plut. *De exilio* 14). Many Greek writers and philosophers came from outside Athens (their geographic distribution is usefully mapped in Grant 1971: 37–8). Aristotle, Theophrastus, Strato and Eudemus were all metics, but Demetrius was an Athenian and a successful political leader (Diog. Laert. 5.75 = F 1), who secured the right to buy land for Theophrastus (Diog. Laert. 5.39).

The idea that Aristotle had encouraged his students to take up the study of one particular area (Jaeger 1923/1948), so that the division of labor in the school resembled that of a nineteenth-century academic research team under the guidance of a professor, is anachronistic. It is, however, natural to assume that some form of specialization occurred in line with opportunity and people's interests. The book-lists in Diog. Laert., though incomplete, also suggest this. All were quite versatile and worked in other areas as well—to "specialize" would have been regarded as unusual. The tentative chronology in Figure 36.1 may assist in placing the Peripatetics, in particular the school heads (based on Diog. Laert. 5, Gottschalk 1987, Dorandi 1999: 35–7, Schorn 2003).

Our information regarding each of the individuals listed (often in late sources) probably survived because they made their mark in at least one area of expertise. Theophrastus is famous for his plant studies (his impressive taxonomy was influential until Linnaeus in the eighteenth century) and his *Characters*, even if he covered much more; Strato primarily worked on topics in physics (hence his nickname "the physicist," Diog. Laert. 5.58). His successor in turn, Lyco of Troas, is known for his interest in education (F 2–3 and 16 SFOD) and ethics, but also for a liking of luxurious dinners (also said of Demetrius F 43A F–S) and dress style (also said of Aristotle, Diog. Laert. 5.1). After Lyco the succession lists are incomplete and not in agreement, but we may accept Demetrius as the next in line. Then by 156–5 BC we hear of the head of the Peripatos, Critolaus, as part of a delegation of philosophers visiting Rome to plead on behalf of Athens. By this time philosophers often functioned as negotiators or advisors, neutral agents who could represent different interest groups in a city (Gottschalk 2000: 367).

Early members of the Peripatos as a rule took Aristotle's ideas as their starting-point, but criticism and disagreement were quite possible (see for example, Theophr. *Metaph.* and F 694 FHSG) and in a way unavoidable, because Aristotle was a typical pioneer who often did not fully develop every area he ventured into: Plato may have been "the most unsystematic of creators," but Aristotle was "the most inconclusive of systematisers" (Dodds 1923: 10). Thus Aristotle's philosophy was treated as a dynamic set of proposals and hypotheses to understand and explain the world.

Language and logic

One of Aristotle's major innovations was to formalize analysis of language and reasoning, thus establishing logic as a distinct area (see Di Lascio, ch. 19, this volume; for Plato's role, see Woolf, ch. 10, and Wolfsdorf, ch. 11, this volume) and syllogistic reasoning, that is, drawing conclusions from given premises. His *Categories* became a core subject in the later tradition (Sharples 2010b: chs. 7–9). Theophrastus made contribu-

tions to the relation between the second and third figures in the theory of the syllogism (Diog. Laert. 5.42, 44). He revised Aristotle's modal logic, suggesting that in a chain of reasoning the conclusion follows the weaker premise, not the major (a kind of weakest link principle). Further revision included changing the system of dialectical predication, where he wanted to subsume the four predicables (genus, definition, distinctive property, accident) under definition, perhaps aiming for "a single universal method" (as Alexander suggests, F 124A–B FHSG). He also provides us with a clear definition of the dialectical *topos*, an argumentative strategy or principle (F 122B), which was lacking in Aristotle's work on dialectic, the *Topics*. He is said to have introduced a doctrine of hypothetical syllogisms, possibly in collaboration with Eudemus. His comments on language advance grammar and style, with a notable emphasis on the use of appropriate language in each field. After Theophrastus very few contributions to this field survive (for example, Eudemus F 25–9; Strato F 19; 27–30).

The study of nature and its foundations

Aristotle wrote many original and penetrating studies of nature (physics) and its foundations (metaphysics—later collected together under the titles *ta physika* "physics" and *ta meta ta physika* "metaphysics"). They are grounded in empirical work, but also highly theoretical, responding creatively and critically to the early Greek and Platonic world views of nature, while also incorporating many of the earlier ideas into a new theoretical framework. Like Plato he wanted to build a comprehensive system for traditional and novel elements (but with very different outcomes). His use of material principles and metaphysical underpinnings, presupposing an ontology based on ten general "categories" or "modes of being," gave his theory analytical clarity and coherence (see Falcon, ch. 22, this volume).

With such a system in place, what could his successors do to bring the subject forward? In their own way Theophrastus, Strato and Eudemus are seen to grapple with both large and small problems in Aristotelian physics (which is presupposed), and their expression of disagreement is often muted, raising difficulties early on, but soon turning these into diverging proposals (Sharples 1985; id. 2001). The extant fragments show engagement with important issues in the treatises (principles), but also the consequences and inconsistencies in the face of new empirical findings. In line with Aristotle's approach they wrote retrospective surveys as a preparation for analysis: Theophrastus occupied himself with his predecessors in natural philosophy (F 225–45 FHSG), Menon did so in medical history, Eudemus in geometry and astronomy, and Aristoxenus in music. Thus former achievements would be subjected to methodical assessment against the Peripatetic criteria and preservation, making the philosophical enterprise a continuous discourse.

Theophrastus did indeed follow Aristotle's views in many respects (F 151B), studying his natural philosophy and choosing to expand and adjust where he felt the need. But his independence should not be doubted (Longrigg 1966: 177; cf. Regenbogen 1940: 1549.22–57), even if he expresses it tentatively. He too attributes order and regularity to nature, "which does nothing in vain" (*CP* 1.1.1; 2.1.1; 4.4.2; *Metaph.* 10a22–5 Gutas), but with certain reservations. He does not shy away from discussing the foundations of the field ("principles," F 142–4 FHSG) and raises questions about what kind of things principles are, how many and their problematic aspects: for example, he points out that one principle can make the universe move (external cause), but cannot account for any diversity (internal plurality); then again he reminds us that two or more principles

may jeopardize its coherence. On the question of what kind of principles there are, two possibilities are offered: they are either the ultimate source of things (a foundationalist answer), or else they are general laws governing everything (that is, they are rules of practice). By restricting the number of principles (which he also discussed from a historical perspective by reviewing previous views, F 224–30 FHSG = Simpl. *in Phys.* 22.22–28.31) and the scope of their influence in the physical realm, he can keep certain accidental occurrences (for example, thunder, but also evil in the ethical context) outside the range of events with a final cause. This is in line with his attempt to reach a limited teleology (*Metaph.* 7a19–b9, 10a21–23), which is confirmed in the medieval Arabic translation (Gutas 2010) and *Metarsiology*, perhaps his work on cosmological phenomena listed in Diog. Laert. 5.44 and preserved in an incomplete Arabic summary (Daiber 1992). Despite his aporetic approach, which raises a lot of questions without presenting answers and thus *seems* tentative or inconclusive, his short treatise on metaphysical principles *implies* a critique of Aristotelian teleology (Repici 1990), and is in line with his tendency to allow for alternative explanations (Sharples 1998: 228 and n.645). That this has practical consequences is also clear when, for instance, he tries to accommodate anomalies in botany within the Aristotelian framework (*Causes of Plants* book 5), since their existence complicates the Aristotelian position that in nature "nothing happens in vain." Clearly he felt a need to discuss the intractable in nature to be comprehensive, no matter what the consequences (Vallance 1988).

As the most fundamental concepts of Aristotelian physics, motion, place and time attracted considerable attention among his successors. Theophrastus offers challenges to Aristotle's ideas (Simplicius *in Phys.* 604. 5–11, 639.15–22—as does Strato, see below), and also to his views on change and alteration (*ibid.* 566.18). He famously questions Aristotle's definition of place (F 146–49, already noted in Regenbogen 1940: 1549), and time (F 150–151C). The discussion of place is an interesting case, because his queries concerning Aristotle's concept of place as a two-dimensional surface of an object were read by the Platonist Simplicius (writing c. 535–40 AD) and followed through by favoring the dynamic instead of static concept in line with his own teacher's view (Damascius).

It may be worth looking a bit closer at this discussion of place (or space), which has received considerable attention in recent studies of Peripatetic physics (Sorabji 1983 and 1988: 56, Algra 1995: 234–48; for the period 200 BC–200 AD see Sorabji and Sharples 2007, Sharples 2010a). It illustrates some of the issues concerning source analysis of fragments, as well as the multi-layered nature of our sources. Theophrastus raised pertinent questions with regard to Aristotle's definition of natural place (*Cael.* 310b3; cf. *Ph.* 214b12–215a11) as the inner limit of the surrounding place. What he saw as problematic is the idea that place has some kind of dynamic power which acts as a kind of final cause (Sorabji 1992: 2) which makes things go in their place. One reason for such a move is that the vacuum alone could not explain this (as atomists claimed). This is intended "to make place *explain* (that is, be the *aitia* of) the natural movements of the elements" (Sorabji 1988: 186). Theophrastus thinks this is problematic for several reasons: that place may not be surface; that place may not be immobile etc. Such puzzles signal quite clearly that Aristotle's view is considered unsatisfactory (Simpl. *in Phys.* 639.12–20, part = F 149 FHSG):

> May it not be that place is not something that exists in its own right but is spoken according to the arrangement and position of bodies, with reference to

> their natures and capacities? And similarly in the case of animals and plants and in general all things with a differentiated structure, whether living or not, provided that their nature involves a shape. … And for this reason each thing is said to be in its own space by virtue of its having its proper ordering.

When Simplicius takes up this discussion in his commentary on the *Physics* in the early sixth century ad, he clearly reads Theophrastus' *Physics* alongside Aristotle ("Theophr. in his *Physics* presents aporiai" 604.5–6) and then develops a view which goes beyond the Theophrastean comments (Sorabji 1992). We owe our access to this discussion in the early Peripatos to the school discussions of the late Platonists, which also involved ideas of Simplicius' teacher, Damascius (c. 460–540 AD). Here his exploratory queries are converted into a more positively formulated suggestion, that we should move away from the idea of a place having a power, but rather should think about things as organisms, where the *arrangement* or ordering (*taxis*) is responsible for the place of the whole and its parts. The source analysis for such cases clearly has to be aware that these thinkers from late antiquity espoused a type of Platonism that had undergone many changes and absorbed many influences, which is why in the late eighteenth century it received the (inaccurate) label "Neoplatonism." Studies of the context (in this case, Baltussen 2008) will teach us that Simplicius is a reliable source, hence that we can trust his quotations (which is not the same as trusting his motives for selection or how much he quotes). Theophrastus' typical questioning style could simply reflect his approach in teaching, but because he uses this *aporetic* method consistently, it seems a deliberate aspect of his approach to Aristotle.

Eudemus followed Aristotle closely in the main topics of his *Physics* (F 98, 109 W.), but shortening its treatment by way of paraphrase (F 35, 113). Remarkably, as Simplicius tells us (*in Phys*. 639.13–22 = F 149), this way of reworking Aristotle did not lead to loss of clarity. Eudemus was clearly involved in a close reading of the text. But he too is still very much into clarifying and extending rather than becoming fully independent: his work is reactive before it is critical (Baltussen 2006). Simplicius does report a more overt questioning of Aristotle's views, even using Eudemus' *Physics* to support a variant reading in the manuscripts (*in Phys*.522.24–6). Clearly a "first-generation" Peripatetic had great authority when such problems arose.

Strato's ideas constitute a departure from some important positions in Aristotle (see Gatzemeier 1970): he rejects the notion of an external prime mover as cause of the universe (F 32 Wehrli), opting for a more mechanistic model which appeals to *tuchē*, fortune, and a notion of nature which is independent yet not completely mechanistic (note *automaton*,F 35; Berryman 2003: 364). It seems that he tried to reduce differentiation in the theory by aiming for one unified concept of motion (F 71). As to its material basis he moves in a different direction (noted by Simplicius, F 75) with a new theory of matter consisting of corpuscules and void to account for the difference in weight of objects. He also tried to solve a problem in Aristotle's theory of place (Algra 1995) and observed that falling objects accelerate (F 73). He did not accept the tendency of upward movement by the elements (as did Arist. at *Phys*. 4.5), but rather a downward motion which could result in a dislocation by heavier elements of lighter elements (which might then be pushed up and replaced, a process he calls *antiperistasis*). The qualities, so instrumental in the cycle of the four elements, are merely acting on account of their quantity, it seems (F 49), with hot and cold as basic constituents of nature, described as "bodily powers" (F 65 a, b; Gatzemeier 1970: 122). Finally, we find

him criticizing Aristotle on his definition of time, protesting that it is not a *measure* of change, although he hardly differs from him in his considered view of time overall (F 75–6). All these points illustrate how Strato in his discussions of Aristotle's views in physics takes a very different direction in physics, the area that seems to have had his special interest. Unlike others, he discusses zoology in the broader context of physiology (Wehrli 1969: 103). Ancient sources still classify him as a member of the school, which suggests that there was a considerable tolerance towards dissent.

Several views on the soul present a very similar picture. To the extent that Aristotle considers the soul a principle of natural things (see Falcon, ch. 22, this volume), it is part of his physics, since it is characterized by motion, the key concept for all natural processes. Plato had already determined the special nature of souls as self-movers (*Phd.* 245c–e). Aristotle's account of the soul and its capacities constitutes a major shift in that he makes the soul the *form* of the compound and aims to separate it from the senses. Theophrastus and Strato carefully examined his theory, since the former asked whether the intellect was really inherent or from outside (F 307A FHSG), and the latter eliminated the distinction between sensory and soul motion, (again) aiming for a more unified notion (F 74 W). Both respond to and extend the discussion of Aristotle in their work *On Motion* and continue to treat the activities of the soul (*energeias*) as motions (*kinēseis*). It is significant that Simplicus provides us with information about both within one context (*in Phys.* 965.1–21), ending his discussion with an argument from authority: "from this it is obvious that the soul moves *according to the best of the Peripatetics*." The divergences from Aristotle raise the question what a Peripatetic's allegiance really means and whether it threatens the school's unity, but as already noted we should not assume that disagreement would be an immediate threat. It depends on how much disagreement one can tolerate before the "school" loses its character as a unified front. But apparently Peripatetics who criticize the founder's ideas still are Peripatetics.

There is a gap in evidence for the history of the school between Lyco (c. 280 BC) and Critolaus (156 BC). This problem is at present insurmountable: evidence is simply lacking. In the first century BC we find several individuals who were regarded as Peripatetics. Some of them expressed strong disagreement with Aristotle: in particular Boethus of Sidon who receives admiration from the commentator Simplicius for his "deep thought" (*in Cat.* 1.18) and Xenarchus of Seleucia (Strabo 14.5.4; cf. Julian *Or.* 5.162, Simpl. *in Cael.*1), who criticizes Aristotle's fifth element, and like Theophrastus denies the existence of *aether* (Hankinson 2004).

Ethics and politics: urban life in the Hellenistic era

The continued emphasis on physics in the early Peripatos after Theophrastus had been somewhat of an anomaly: with the coming of Stoicism (founded by Zeno around 300 BC) and Epicurus (teaching from c. 311 BC onwards) there was a move towards (applied) ethics with less emphasis on (meta)physics as the main focus of philosophical activity (Gould 1970: 20–1). New political realities brought new questions center stage: how does one become wise so as to remain unaffected by difficult times? Should a philosopher engage with society? Get married? Is God interested in us? Is our fate predetermined? Philosophy thus was reclaimed as a pragmatic perspective on life, instead of a detached analysis of the world into abstract categories. The sources only give a limited picture of how the Peripatetics initially dealt with this shift, but after Strato the evidence suggests a shift to politics and education. To what extent they follow Aristotle's groundwork

into fundamental questions on moral principles, ethical character and practical wisdom is not always easily determined.

That the question "how to live one's life?" became a central concern in philosophy, in particular the goal or purpose (*telos*) of life, may well have been brought on by historical circumstances and how they shaped contemporary debates among Stoics and Epicureans: they made physics central in one sense, but subordinate to questions of morality, fate, and emotional equilibrium, as some clever analogies illustrate. The Stoics compare philosophy to an egg: "the shell is Logic, next comes the white, Ethics, and the yolk in the centre is Physics" (Diog. Laert. 7.40). Their aim was to treat these areas as closely interconnected but ethics, and the life of a wise man, was the ultimate goal.

While Aristotle's major contributions to ethics outlined his ideal of *eudaimonia* (*Nicomachean Ethics*, *Eudemian Ethics*), the Peripatetics seem to have limited themselves to individual problems and practical applications, as their involvement in politics also suggests. We should avoid over-confident statements, as the evidence is very incomplete, mostly based on the lists in Diogenes Laertius (5.42–50; 59–61; 80–1; 86–8) and summary accounts in Arius Didymus (c. 50 BC) and Stobaeus (c. 450 AD). Theophrastus' famous character sketches (*Kharakteres*) can be described as amusing psychological profiles in the style of contemporary comedy: they depict men with a serious personality flaw in an amusing and lively way (for example, the chatterbox, the ambitious man, the oaf, the snob, the gossip). It has been suggested that they are meant to fit Aristotle's idea of character type (*ēthos)*with reference to the analysis of types in *Nicomachean Ethics* Book 2. Combined with Aristotle's doctrine of the mean—the ideal middle between a virtue and a vice—these flawed characters may function as concrete examples of Aristotle's extremes described in abstract terms. Certain fragments support such a connection (Rusten and Cunningham 2002: 19). Yet Theophrastus deviates from Aristotle in focusing on faults and by presenting moral instruction in a humorous fashion.

After Theophrastus Lyco, Demetrius, and Dicaearchus were very active in ethics, politics, and cultural history. Lyco was concerned with education (F 2–3 SFOD) and his eloquence served him well (Diog. Laert. 5.65 = F 1). The fragments show how he was pre-occupied with the goal (*telos*) of life, equally important in contemporary Stoicism (compare also Strato F 134 W.). He defined it as "the true joy of the soul … based upon what is honorable" (Clement of Alexandria *Strom.* 2.21.129 = F 10 SFOD), which provides us with evidence for his eudaimonist leanings, but one infused with "moral fibre." Demetrius was an active politician, holding actual power at Athens for ten years (317–307 BC; O'Sullivan 2009) and was so successful that many statues were set up for him—and taken down later (F 19)—about which he remained unfazed (Diog. Laert. 5.82). Dicaearchus became the special advisor to King Ptolemy in Egypt.

Emotions were also discussed in ethical context. To integrate pleasure and pain into ethical thought had been an Aristotelian innovation (Frede 2006). One report has Theophrastus comment that the soul's stay in the body is fraught with difficulties, because "for a short period of time" it pays a high price for having to deal with emotions such as grief, fear and desire (F 440A; pleasure, normally part of the set, is not relevant in this context). This comment implies a disembodied stage for the soul, in which it is freed from bodily strains (Aristotle's made the problematic comment that the rational soul or *nous* comes from outside at *Generation of Animals* 736b27–8, one may compare *De an.* 3.4). Theophrastus also attempted to analyze the effect that pleasure and pain had in accompanying a mistake, but our source (F 441 FHSG = Marcus Aurelius *Meditations* 2.10) does not allow us to decide whether this is a puzzle about motivation or voluntary

action (see Arist. *Eth. Nic.* 3.1, 1109b30–32, where it is linked to praise and blame). His comments on envy show him to be an acute observer of human nature, as he describes it as an affliction which creates "continuous pain," since people grumble about their own troubles as well as the good fortune of others (F 443–4). Lyco also considers the problem of (mental) distress, but from a different angle: when asked what causes good people pain, he answers "a wicked man enjoying good fortune" (F *17 SFOD).

Broader themes are covered in subsequent generations, in particular politics and law. Theophrastus and Strato tackled conventional topics (kingship, justice, modes of life and happiness; only titles survive, Diog. Laert. 5.59), but for Lyco we have no evidence, which is surprising given his fame and long tenure, except reports of his efforts to educate young boys and the good advice he gave his fellow citizens (Diog. Laert. 5.66). Demetrius, on the other hand, was involved in Athenian politics for seventeen years (Gottschalk 2000, O'Sullivan 2009), ruling with a mandate from the Macedonian king, until he got chased out by his namesake Demetrius (son of Antigonus, later called "D. Poliorketes") in 307 BC. He introduced some legislation, writing at least four books on the matter (Diog. Laert. 5.75–85), one of which dealt with curbing excesses in funerary practices (F 135 W.). To what extent these activities are philosophical (or even Peripatetic) in nature is not easily made out, but it is possible that he followed the trend of wanting more detailed laws (Gagarin 1999: 363), as found, for instance, in Plato's *Laws*, or more subtle criteria, as seems the case in Theophrastus' "On Contracts" (F 650 FHSG).

Intellectual context

Indirect evidence for the continuation of the Peripatos can be gained by considering very briefly the intellectual context of the school by way of interactions with rival schools in the late fourth and the third centuries. To look for different forms of influence is important, since such interactions have influenced both the transmission of materials and the ancient and modern reputation of the school.

Political and social changes of the Hellenistic period may have brought new philosophical attitudes with them, but discussion and debate remained a core activity. In Athens schools would constantly react to ideas and criticism. Interaction need not always be adversarial or polemical: concepts and ideas can be adopted and reworked into a new framework. One example is Strato who advocated elemental motion in physics, a view which resembles Epicurus' theory. Lucretius the Epicurean (c. 100 BC) was influenced by Theophrastus (Sedley 1998: ch. 6). In ethics we may point to Lyco's definition of life's goal as including pleasure, which was forged in opposition to the Stoics, who emphasized rationality and judgment (White 2004, SFOD: 390–1). Several polemical titles aimed at individual Stoics or Academics in the book lists also testify to the lively debates in Athens (Diog. Laert. 5.49: *Against the Academics*; cf. 7.163: *Against Cleanthes* (the Stoic) = Aristo F 9, no. 14 W.).

Much of the evidence for interactions with other schools concerns implicit traces of action and reaction: problems, questions, and answers were often formulated in a particular way because contextual factors and contemporary debates are in play, which did not always need to be made explicit at the time. Thus the problem of knowledge, a dominant and influential topic of debate in the Academy under Arcesilaus and in other schools, had an impact on Peripatetic responses (Gottschalk 2004). A major challenge to the Aristotelian optimism in epistemology was presented by the Stoics and Skeptics.

Aristotle's view that knowledge is possible, because sense perception and object were perfectly attuned to each other, so that a grasp of proper objects (color by the eye, odors by the sense of smell etc., see his *De sensu*) could lead to a reliable understanding of the external world, came under attack by Stoics and Epicureans (who put strong qualifiers in place) or Skeptics (who questioned it). Stoics more narrowly defined a grasp of the truth (*katalēpsis*), while the Skeptics, doubting even the possibility of access to the truth, retrenched into a position of withholding judgment (*epochē*). Theophrastus seems to have been influenced by these considerations. His meticulous studies of sense perception exhibit a cautious streak, and he raises all kinds of difficulties which seem to express doubts about the attainability of secure and comprehensive knowledge. This does not make him a Skeptic, but it does betray his resignation in accepting limits to human comprehension (Regenbogen 1940: 1554). Theophrastus also responds to the Stoic Zeno and Epicurus in a long fragment surviving in Philo (F 184 FHSG) on the question of the eternity of the world (denied by Aristotle *Cael.* 1.10–12). In four counter-arguments Theophrastus argued with some vigor that Zeno's position is unacceptable.

Conversely, Aristotelian ideas may have influenced others. Parts of Theophrastus' (doxography in) physics have echoes in Epicurus (F 29–30 Usener; Sedley 1998: 184n). Aristotle's account of pleasure and pain recognizing only instantaneous pleasures as real (*Eth. Nic.*10.4, 1174a17–23) may well have brought Epicurus to distinguish between kinetic and static pleasures in order to allow for intrinsic pleasures for activities "that do not contain their own ends in themselves" (Frede 2006: 267; see also Morel, ch. 33, this volume). Aristotle's logic and some parts of his scientific work were used by Chrysippus. He was important enough to be attacked by several thinkers (some examples in Sandbach 1985: 15, but his overall conclusions, mostly denying influence, are exaggerated).

The influence of the school is even more difficult to measure, when we look at their impact in areas of politics, drama, and everyday life. For instance, the Ptolemaic kings of Egypt had several Peripatetics as their advisors; the comedy writer Menander, a friend of Theophrastus and Demetrius, wrote plays with notable characters and a penchant for moral maxims which became very popular. Here "impact" cannot be measured because of the subtle ways in which intellectual debates filtered into the spheres of everyday life. Whatever the definition of "influence," it is clear that Peripatetic ideas played a role in contemporary thought.

Epilogue

Any attempt to capture the early Peripatos in quick and easy generalizations runs into difficulty: the evidence is fragmented and easily misrepresents the people and ideas associated with the school. The central role of Aristotle requires a balanced description of the relationship between his work and that of his followers. Their link to the school and Aristotelian thought is perhaps one of "family resemblance," since for individual cases it can arise by one's connection to a teacher ("lineage" as in Diog. Laert.), one's doctrinal allegiance (early scholarchs) or even some form of labeling by oneself or others. Thus the difficulties we encounter flow from the fragmentary nature of the sources. We saw that the reactive attitude of early successors did not necessarily mean dependence, and that the debates they took part in also strongly colored their approach.

The account given here suggests that the traditional story of Aristotle as the lone genius and a subsequent decline of the school rests on a particular approach to writing the history of philosophy, almost expecting each successor to be a "new Aristotle." The

successors' central concern was to continue the work of their founder, but they saw their task as a collaborative enterprise *within the framework* he had created, as is shown in how they build on, elaborate, and refine the pioneering writings Aristotle had authored in every conceivable area of research. Consolidation was considered more important than competing for novelty or originality. The extraordinary volume and depth of Aristotle's thought succeeded in combining empirical results with a broad theoretical framework, but thereby made great demands on his students. This had both a stimulating and a limiting effect on their activities.

Over the 250 years following his death (322–c. 50 BC) a range of critical comments, new proposals and theoretical assumptions were added to the body of philosophical thought in the school. But overt criticism increased and Aristotelianism took shape, but also different shades of meaning (Sharples 2001). In fact, temporal and geographical distance to Aristotle seems to translate into doctrinal distancing as well. The school's output clearly represented important aspects of Aristotle's thought: empirical, systematic, and ambitious, the initial heirs concentrated on continuing his project of charting human knowledge, working within the general set of assumptions driving Aristotelian thought. But many individual directions were taken, from which both greater detail and novelty arose, complementing the impressive body of work which had a coherent foundation. They treated it as a work in progress, much like a cathedral which takes several generations to build: the plans are known and the foundations laid out, yet only the full shape, size, and detail will establish a unified and consistent product.

It was probably in the late first century BC that the works of Aristotle could begin to become regarded as a canon, when Andronicus established a corpus in *written* form. Now Peripatetic philosophers could proceed on the basis of an "edition" by way of comments *on* the texts. The *process* of canonization entered its last phase, as traces of early commentaries from Andronicus onwards show (Gottschalk 1987: 1097–1121) and was "complete" when the work of Alexander of Aphrodisias wrote his detailed running commentaries, which became the gold standard for explicating Aristotle. Thus the corpus had gone from a work-in-progress under the first generations to an established canon of considerable, though not unassailable, authority. Subsequent discussion and exegesis could incorporate new problems and solutions, yet present doctrinal cohesion to the world by claiming (rightly or wrongly) a connection to the Aristotelian corpus.

References and further reading

Book 5 of Diogenes Laertius' *Lives of Greek philosophers* (Greek and English, Loeb Classical Library, 2 vols) presents the main primary evidence for the lives and works of the early Peripatetics (Aristotle to Demetrius). For introductions to this topic see: R. W. Sharples (2010a) "Peripatos from 100 BCE to 200 CE" in L. Gerson *Cambridge History of Philosophy of Late Antiquity* (an excellent treatment of the subsequent period) and R.W. Sharples (2010b) *Peripatetic Philosophy from 200 BCE to 200 CE* (a very useful collection of primary sources on the post-Hellenistic era up to Alexander of Aphodisias; with introduction and commentary to each chapter)

Sources

Editions

Many of the works and extant fragments of the Peripatetics have been translated (or will be soon) thanks to the international Project Theophrastus, which has undertaken the enormous task of re-editing and translating the fragments for Theophrastus (FHSG with a series of commentaries being published by Brill) and

subsequent Peripatetics, published in Rutgers Studies in the Classical Humanities (RUSCH I–XVI): see below under Bodnár, Desclos, Fortenbaugh, Sharples, and White, replacing the outdated collection of F. Wehrli (*Schule des Aristoteles* 1944–59). In addition smaller works were translated by a number of individuals: G. Stratton, *Theophrastus' On the Physiology of the Senses* (1917); J. Rusten, *Theophrastus. Characters* (Loeb Library 1992); other opuscula by various scholars (Coutant; Eichholz; Sider); *Meteorology* (from the Arabic) in Daiber 1992; for Strato see Desclos and Fortenbaugh 2010; for Eudemus see Sharples and Baltussen in Bodnár and Fortenbaugh 2002; for Aristo or Lyco and Hieronymus see Fortenbaugh and White 2002 and 2004.

Translations, commentaries on smaller works (opuscula)

Coutant, V. *Theophrastus On Fire* (1971), *On Winds* (1975)
Daiber, H. *Theophrastus Meteorology* [translated from the Arabic] (1992)
Eichholz, D. E. *Theophrastus On Stones* (Oxford 1965)
Eigler, U. and Wöhrle, G. *Theophrastus De Odoribus* (Teubner 1993)
Einarson, B. *Theophrastus, On the Causes of Plants* (Loeb Library 1990)
Fortenbaugh, W. W., Sharples, R. W. and Sollenberger, M. *Theophrastus On Sweat, on Dizziness and on Fatigue* (Brill 2003)
Gutas, D. *Theophrastus, On First Principles (known as his Metaphysics), Philosophia Antiqua 119*. Leiden; Boston: Brill, 2010
Rusten, J. *Theophrastus: Characters* (Loeb Library 1992)
Sider, D. and Brunschön, C. W. *Theophrastus On wheather signs* (Brill 2007)
Stratton, G. *Theophrastus on the Physiology of the Senses* (1917)

References

Algra, K. A. (1995) *Concepts of Space in Greek Thought*, Leiden, E. J. Brill.
Baltussen, H. (2000) *Theophrastus against the Presocratics and Plato. Peripatetic Dialectic in the De sensibus*, Leiden, E.J. Brill.
Baltussen, H. (2002) "Wehrli's Edition of Eudemus of Rhodes. The physical fragments in Simplicius *On Aristotle's Physics*," in I. Bodnár and W. W. Fortenbaugh (eds.) (2002): 127–156.
Baltussen, H. (2006) "Addenda Eudemea," *Leeds International Classical Studies* vol. 5.01 (August) 1–28 at http://www.leeds.ac.uk/classics/lics/2006/200601.pdf
Baltussen, H. (2008) *Philosophy and Exegesis in Simplicius. The Methodology of a Commentator*, London, Duckworth.
Barnes, J. (1997) "Roman Aristotle," in J. Barnes and M. Griffin (eds.) *Philosophia Togata II: Plato and Aristotle at Rome*, Clarendon Press, Oxford: 1–69.
Berryman, S. (2003) "Ancient Automata and Mechanical Explanation," *Phronesis* 48: 344–69.
Bodnár, I. and W. W. Fortenbaugh (eds) (2002) *Eudemus of Rhodes*, New Brunswick and London, Transaction Books.
Brink, K. O. (1940) "Peripatos," *RE* Suppl. 7: 899–949.
Daiber, H. (1992) "The *Meteorology* of Theophrastus in Arabic and Syriac Translation," in W. W. Fortenbaugh and D. Gutas 1992: 166–293.
Desclos, M.-L. and W. W. Fortenbaugh (eds) (2011) *Strato of Lampsacus: text, translation and discussion*, New Brunswick and London, RUSCH XIV.
Dodds, E. R. (1923) *Select Passages Illustrating Neoplatonism*, London, New York and Toronto, The Macmillan Co.
Dorandi, T. (1999) "Chronology," in K. A. Algra, J. Barnes, J. Mansfeld, M. Schofield (eds.) *Cambridge History of Hellenistic Philosophy*, Cambridge, Cambridge University Press: 31–54.
Fortenbaugh, W. W. (ed.) (1983) *On Stoic and Peripatetic Ethics: The Work of Arius Didymus*, New Brunswick and Oxford, RUSCH I.
Fortenbaugh, W. W. (ed.) (1985) *Theophrastus of Eresos. On His Life and Work*, New Brunswick and Oxford, RUSCH II.
Fortenbaugh, W. W. (ed.) (1988) *Theophrastean Studies. On Natural Science, Physics and Metaphysics, Ethics, Religion, and Rhetoric*, New Brunswick and Oxford, RUSCH III.
Fortenbaugh, W. W. and P. Steinmetz (eds) (1989) *Cicero's Knowledge of the Peripatos*, New Brunswick and London, RUSCH IV.

Fortenbaugh, W. W. and D. Gutas (eds.) (1992) *Theophrastus. His Psychological, Doxographical and Scientific Writings*, New Brunswick and London, RUSCH V.
Fortenbaugh, W. W. and E. Schütrumpf (eds) (1999) *Demetrius of Phalerum. Text, Translation and Discussion*, New Brunswick and London, RUSCH IX.
Fortenbaugh, W. W. (2001) *Dicaearchus of Messana. Text, Translation and Discussion*, New Brunswick and London, RUSCH VIII.
Fortenbaugh, W. W. and S. White (eds.) (2004) *Lyco of Troas and Hieronymus of Rhodes.Text, Translation and Discussion*, New Brunswick and London, RUSCH XII.
Fortenbaugh, W. W. and S. White (eds) (2006) *Aristo of Ceos. Text, Translation and Discussion*, New Brunswick and London, RUSCH XIII.
Fortenbaugh, W. W. and E. Pender (eds.) (2009) *Heraclides of Pontus. 2: Discussion*, New Brunswick and London, RUSCH XV.
Frede, D. (2006) "Pleasure and Pain in Aristotle's Ethics," in R. Kraut (ed.) *The Blackwell Guide to Aristotle's* Nicomachean Ethics, Oxford, Blackwell: 255–75.
Gagarin, M. (2000) "The Legislation of Demetrius of Phalerum and the Transformation of Athenian Law," in Fortenbaugh and Schutrümpf (eds.) (2000): 347–65.
Gatzemeier, M. (1970) *Die Naturphilosophie des Strato von Lampsakos.Zur Geschichte des Problems der Bewegung im Bereich des frühen Peripatos*, Meisenheim am Glan, A. Hain.
Gottschalk, H. B. (1972) "Notes on the Wills of the Peripatetic Scholarchs," *Hermes* 100: 312–42.
Gottschalk, H. B. (1987) "Aristotelian Philosophy in the Roman World," in W. Haase (ed.) *Aufstieg und Niedergang der Römischen Welt* II 36.2, 1079–174.
Gottschalk, H. B. (2000) "Demetrius of Phalerum: A Politician among Philosophers and a Philosopher Among Politicians," in Fortenbaugh-Schütrumpf (eds.) (2000): 367–80.
Gottschalk, H. B. (2002) "Eudemus and the Peripatos," in I. Bodnár and W. W. Fortenbaugh (eds.) (2002): 25–37.
Gottschalk, H. B. (2004) "Peripatetic Reactions to Hellenistic Epistemology," in W. W. Fortenbaugh and S. White (eds.) (2004): 375–88.
Gould, J. B. (1970) *The Philosophy of Chrysippus*, Albany NY, State University of New York Press.
Grant, M. (1971) *Ancient History Atlas: 1750 BC to AD 595*, London: Weidenfield and Nicolson.
Gutas, D. (2010) *Theophrastus on First Principles (known as his Metaphysics). Greek Text and Medieval Arabic Translation*, Leiden, E. J. Brill.
Hankinson, J. (2002–3) "Xenarchus, Alexander and Simplicius. On Simple Motions, Bodies and Magnitudes," *Bulletin of the Institute of Classical Studies* 46: 19–42.
Jaeger, W. (1948) *Aristoteles.Grundlegung einer Geschichte seiner Entwicklung*, Berlin 1923 (Engl. ed. Oxford 1934, repr. 1948)
Longrigg, J. (1966) "Review of P. Steinmetz 1964," *The Classical Review* 16.2: 177–9.
Lynch, J. P. (1972) *Aristotle's School. A Study of A Greek Educational Institution*, Berkeley: University of California Press.
Mejer, J. (2009) "Heraclides' Intellectual Context," in W. W. Fortenbaugh and E. Pender (eds.) (2009): 27–40.
Mirhady, D. (ed.) *Chamaeleon and Praxiphanes*, New Brunswick: Transaction Books.
O'Sullivan, L. L. (2009) *The Regime of Demetrius of Phalerum in Athens, 317–307 BCE: A Philosopher in Politics* (Mnemosyne Supplements 318), Leiden, E. J.Brill.
Primavesi, O. (2007) "Ein Blick in den Stollen von Skepsis. Vier Kapitel zur frühen Überlieferung des Corpus Aristotelicum," *Philologus* 151: 51–77.
Schorn, S. (2003) "Wer wurde in der Antike als Peripatetiker bezeichnet?" *Würzburger Jahrbücher für die Altertumswissenschaft, n.F.* 27: 39–69.
Sedley, D. N. (1998) *Lucretius and the Transformation of Greek Wisdom*, Cambridge, Cambridge University Press.
Sharples, R. W. (1985) "Theophrastus on the Heavens," in J. Wiesner (ed.) *Aristoteles, Werk und Wirkung*, Bd. 1. Aristoteles und seine Schule, Berlin, W. De Gruyter: 577–93.
Sharples, R. W. (2001) *Whose Aristotle? Whose Aristotelianism?* London: Ashgate.
Sharples, R. W. (2006) "Natural philosophy in the Peripatos after Strato", in W.W. Fortenbaugh and S. White (eds.) (2006) *Aristo of Ceos.Text, Translation and Discussion*, New Brunswick: Transaction Books: 307–27
Sharples, R.W. (2010a) "Peripatetics from 100 BCE to 200 CE," in L. Gerson (ed.) *Cambridge History of Philosophy in Late Antiquity* (2 vols.) Cambridge, Cambridge University Press: 140–60.

Sharples, R.W. (2010b) *Peripatetic Philosophy 200 BC–AD 200: an introduction and collection of sources in translation*, Cambridge: Cambridge University Press.
Sollenberger, D. (1992) "The Lives of the Peripatetics: An Analysis of the Contents and Structure of Diogenes Laertius' *Vitae philosophorum* book 5," in W. Haase (ed.) (1992) *Aufstieg und Niedergang der Römischen Welt* II 36.6, Berlin–New York: 3793–879.
Sorabji, R. R. K. (1988) *Matter, Space and Motion*, London, Duckworth.
Sorabji, R. R. K. (ed.) (2010) (2nd edn.) (1st edn 1992) *Philoponus and the Rejection of Aristotelian Science* London: Institute of Classical Studies.
Sorabji, R. R. K. and Sharples, R. W. (eds) (2007) *Greek and Roman Philosophy 100 BC–200 AD (BICS Suppl. 94)* London.
Steinmetz, P. (1964) *Die Physik des Theophrastos von Eresos*, Bad Homburg-Berlin-Zürich, Max Gehlen.
Usener, H. (1887) *Epicurea*, Leipzig: Teubner.
Vallance, J. (1988) "Theophrastus and the Study of the Intractable: Scientific Method in *De lapidibus* and *De igne*," in W. W. Fortenbaugh and R. W. Sharples (eds.) (1998) *Theophrastean Studies*, New Brunswick: Transaction Books: 25–40.
Wehrli, F. (ed.) (1967–1969) (2nd edn.) *Die Schule des Aristoteles*, Texte und Kommentare.10 Hefte und 2 Supplemente. Basel, Benno Schwabe: 1944–1959.
Wehrli, F. (1983) (2nd edn. 1994). "Der Peripatos bis zum Beginn der römischen Kaiserzeit," in: *Neuer Überweg. Antike* Bd. 3: 459–599.
Zeller, E. (1895) *Grundriss der Geschichte der Griechischen Philosophie*, Leipzig, O. R. Reisland.

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37
PHILOSOPHY COMES TO ROME

Tobias Reinhardt

There is an ancient Roman text which tells a story of how philosophy came to Rome and what Romans have to gain from it. While it is written by someone who has a vested interest in the matter—Cicero—it provides a good starting point in a number of ways. It is assertive in the way in which it distinguishes the Roman appropriation of Greek culture generally and philosophy in particular from a simple form of Hellenization. Its format, the dialogue, is itself inherited from the Greeks, but arguably used in a way which is distinctly Roman. Its main protagonists are leading statesmen of the Republican period, men who can be seen to embody Roman traditional virtue, and yet articulate en passant what Greek thought has to offer them.

The text is the *De re publica*, written between 54 and 51 BC (see Zetzel 1995; Powell and North 2001). The fictional date is 129 BC, the main interlocutor P. Cornelius Scipio Aemilianus Africanus, who was to die suddenly later in the same year under mysterious circumstances. The dialogue is set on his country estate. Its guiding questions are: what is the best state, and who is the best citizen or the best leading man? The beginning of Book 1 is lost, and the text begins with reflections on the expectations Roman aristocrats have to meet. The elder Cato is cited (§1) as a man who preferred the political stage and the storm of public life to a well-earned retirement. Human beings are said to have a natural inclination towards virtue and public engagement. Virtue, though, must be enacted, which is precisely what those merely talking about the subject in lecture rooms (Greek philosophers, we assume) do not do (§2). It is then made clear that statesmen alone have any opportunity at all to enact virtue. Is it to be understood that only the Romans are in a position to do this since they hold the power over the known world? A quotation from the poet Ennius in §3, to the effect that great and dominant cities are more significant than small villages, would seem to suggest that it is.

Eventually the arrival of other characters begins to punctuate the discussion. The interlocutor Tubero's interest in scientific matters turns the discussion towards a "typically Greek", that is, slightly contrived and highly theoretical issue (the recent alleged appearance of a second sun). The introduction of this topic is self-referential in the context of the discussion: what is at issue is, among other things, the question where the serious business of the state ends and intelligent but inconsequential conversation begins. Scipio praises Socrates' interest in moral questions and his refusal to engage in reflection on unsolvable scientific problems (§15), to which Tubero replies that for Socrates, on the evidence of Plato's dialogues, engagement with moral questions includes attention to matters of arithmetic, geometry, and music (§16). When the dis-

cussion returns to the double sun (§19), Laelius asks if matters of the household and the state had already been dealt with, given that his friends spend time discussing obscure celestial phenomena, a question which reflects the traditional Roman view. The interlocutor Philus, in an argumentative move which is inspired by Stoic thinking, replies by questioning the underlying distinction, arguing that our house is the whole world the gods have provided us with. Rather than restricting himself to introducing an alien, Hellenizing viewpoint, Philus then follows up with a Roman example (§§21–2). The conqueror of Syracuse in 212 BC, M. Marcellus, claimed only one item after the sacking of the city for himself—a model of the spheres of the planets, previously owned or even manufactured by Archimedes; the same Marcellus donated a model of the spheres to the temple of Virtue. A generation later, we are told (§23), just before the battle of Pydna in 168 BC, the legate Sulpicius Gallus, who was interested in astronomy, was able to provide a rational explanation for an eclipse which terrified his army and was thereby able to avoid a panic among his troops, who went on to win the battle.

It is tempting to read this story against the earlier claim that only the powerful can enact virtue. Greeks excel at theorizing about virtue or at working out the movements of the planets, but by themselves these insights and scientific achievements are inert. In order to put theory into practice, one needs opportunity. Opportunity is afforded by power—and power resides with the Romans, for now. Before we feel a trifle disappointed over the lack of profundity in this story, we should appreciate that Cicero implicitly rejects other models of interpreting the Roman engagement with Greek philosophy. Studying Greek astronomy, traditionally a branch of philosophy, and by extension reading philosophical treatises, and talking to Greek philosophers is not in some sense equivalent to the contemporary fashion of filling one's house with Greek artworks, that is, a kind of surface appropriation of a culture perceived to be superior. Through his use of the dialogue format, Cicero is able to weave in another point: philosophy should not be consigned to leisure time, the (small) amount of time Roman aristocrats are left with after attending to the important matters of the state or their duties as a patron. Rather, or so Cicero implies, philosophy can help Romans be better Romans.

Another point to note is the use of *exempla*, examples of great men from history. Arguing from and thinking in such examples is often seen as a typically Roman habit. Some examples which we find in Roman philosophical texts, like that of the Roman commander Regulus, who preferred to die in Carthaginian captivity rather than to help facilitate an exchange of prisoners, exist in multiple versions, in different authors, writing in different genres, thereby allowing us to glimpse their adaptability to the different aims of the respective authors. The explanation of the eclipse before the battle of Pydna, apart from showing how handy a basic grasp of astronomy can be, conveys that "already our ancestors" were clever enough to avail themselves of supposedly useless theoretical knowledge, thus pointedly appealing to the Roman sense of tradition which might otherwise militate against things Greek. At that point in the text Cicero goes on to tell a similar story of Pericles (§25), thereby achieving what one might call an image transfer from one great man (a Greek) to the other (a Roman). Not all Roman philosophical writers use *exempla* in this way, but Cicero and, to a slightly lesser degree, Seneca do.

The use of astronomical knowledge raises another set of issues, one which is close to the concerns of modern scholars. How should one measure the impact philosophy made at Rome? Of course we can point to the writings of people like Cicero, Lucretius and Seneca, but what about actual influence on real and significant events—can we show

that someone, for instance a politician or an advocate, adopted a course of action or made a successful argument which he would not have made if he had not been exposed to Greek philosophy? Obviously the kind of evidence we would be looking for cannot consist in the rationalization of a course of action after the event, quite possibly couched in the specialist terminology of Greek ethics, suitably rendered into Latin. Moreover, we are brought up against another question—is knowledge of other branches of philosophy, for instance ethics, relevantly like knowledge of astronomy? Cicero glosses over these problems by selecting an example which involves a demonstrable effect of Greek wisdom, and by placing it in the context of a wider argument for what Greek learning has to offer.

One final point can be derived from the passage in the *De re publica*. Given the way in which the topic of astronomy is introduced, the reader is invited to make a connection between the eve of the battle of Pydna and M. Marcellus' interest in models of spheres. If the latter had not sacked Syracuse, the two spheres would not have found their way to Rome. It was, on this account, initially an individual who was intrigued by a manifestation of Greek learning.

Let us review briefly and sequentially some of the evidence for the influence of Greek philosophy in Rome.

The earliest Roman writer of whom there are substantial if fragmentary remains is Q. Ennius (239–169 BC). A native of Rudiae in Calabria and thus steeped in the culture of Magna Graecia, Ennius spoke Greek, Latin, and Oscan, an italic language which was eventually superseded by Latin. He came to Rome initially, it would appear, as a teacher, but eventually gained Roman citizenship and a patron in M. Fulvius Nobilior, whom he accompanied on various campaigns. Several works of Ennius, who wrote epic poetry, tragedies, as well as smaller pieces in verse and prose, show an influence of Greek thought broadly speaking. One of them is Pythagoreanism, which existed in some form in southern Italy continuously from the sixth century BC onwards (see Kahn 2001: 86–93). Pliny (*HN* 34.26) reports that during the Samnite war (298–90 BC) a statue of Pythagoras was erected on the Roman forum in response to a Delphic oracle. The statue, according to Pliny, remained there for two centuries. The *Annals*, Ennius' substantial historical epic ranging from the beginnings of Rome to some point in the second century BC, began with an account of how Homer, the main literary model, appeared to Ennius in a dream and told him that he, Ennius, was in fact Homer reincarnate, thus relying on the Pythagorean doctrine of the transmigration of souls (see Skutsch 1985: 147–62). In the smaller poetic work *Epicharmus*, the title character explained to Ennius, who, while dreaming, pictures himself dead in the underworld (the myth of Er in Plato *Republic* book 10 is often assumed to be an influence), the doctrine of the four elements and their equation with Roman deities; the *Epicharmus* is thus the earliest certain example of cosmological didactic poetry in Latin (see Courtney 1993: 30–38). His *Euhemerus*, in prose, drew on the rationalist writings of Euhemeros of Messene (c. 4 BC), who had written a fictional travelogue in which he described an island Panchaia where a publicly displayed inscription listed the achievements of the first kings of the island: Uranos, Kronos, and Zeus. Unfortunately we know next to nothing about the reactions these works provoked in their first audience (see Courtney 1999: 27–30).

Some evidence for the reception of Greek philosophy in literary texts comes from comedy and satire. Terence, whose plays date from the 160s BC, based his play *Adelphoe* on a comedy of the same name by the Greek playwright Menander. According to Diogenes Laertius, Menander was a pupil of Theophrastus, Aristotle's successor as head of

the Peripatos. The way in which the characters' behavior exhibits extremes rather than hitting the mean between them has often been linked with the Peripatetic conception of virtue. Even if these aspects of characterization in Terence are down to philosophical influences on his source material, however, they are not in any way marked as philosophical in the plays themselves (see Martin 1976: 20–3).

Unlike Terence, who, if we can trust his biographer Suetonius, came to Rome as a slave from Carthage, Lucilius (born c. 180 BC, died near the end of the century) came from a senatorial family and commented in his satires on the foibles of his class with the ease and self-confidence of someone who was writing about his peers. In his second book of *Satires* (2.88ff. Marx) he describes a trial which the Epicurean Titus Albucius tried to bring against the Stoic Q. Mucius Scaevola Augur, whom Lucilius probably knew personally. The trial failed, and at the end Scaevola named the real reason for Albucius' hostility. When Scaevola, then propraetor and on his way to take up a post in Asia, came across Albucius in Athens in 119, where the latter lived in the style of an Epicurean, he greeted him with the words *chaere Tite* ("Hello Titus", whereby *chaere* is a Greek word and form of greeting), repeated by the lictors and other attendants who were with Scaevola. The reason why Albucius was from then on an "enemy" of Scaevola, as the punchline of the story has it, was that the pretentiousness of a self-styled Epicurean, his Philhellenism which amounted to abandonment of his Roman identity, had been punctured. If we look back the the story from the *De re publica* with which we started, which made a point of showing how Greek philosophy had been engaged with and put to work as it were, we see here a mode of appropriation of culture satirized which was probably closer to reality in most cases.

Another major event in the second century, described in various sources (Plut. *Cat. mai.* 22; Cic. *Acad.* 2.137; Gell. *NA* 6.14.8–10; Pliny, *HN* 7.112), was the famous embassy by the heads of the Stoa (Diogenes of Babylon), the Academy (Carneades), and the Peripatos (Critolaus) from Athens to Rome in 155 BC, in order to renegotiate a fine which had been imposed on Athens. The official duties apparently left the ambassadors enough time to give lectures, and Carneades famously lectured for and against justice in international affairs on two consecutive days. The practice of arguing for and against a given thesis, and its rationale, is explained elsewhere in this volume (see chapter 34). Carneades seems to have been such a powerful speaker that the whole effort did not create the impression of a set of anodyne academic lectures, and traditional Romans were sufficiently concerned that the elder Cato's demand for a speedy return of the philosophers to Athens was met. It must have amused Carneades that the grounds which were implied by Cato for a swift end to the embassy—that Carneades was corrupting the young men of Rome—were rather similar to some of those for which Socrates had been put on trial in Athens 250 years earlier.

Several other individuals are important for the influence philosophy exercised in Rome over the next century, down to the time when Lucretius, Cicero, and Varro wrote. One of them is the Stoic Panaetius (app. 185–109 BC), who was one of the pupils of the Diogenes of Babylon. He also heard his successor as head of the Stoa, Antipater of Tarsus. Panaetius became close to P. Cornelius Scipio Aemilianus and lived in Rome for a while before returning to Athens, where he died. His work *On Duties* was used as a source for two of the three books of Cicero's *De officiis*. Panaetius' approach to ethics is often characterized as more pragmatic and less attached to the extreme ideal of the Stoic wise man than that of some earlier Stoics, although there is no reason to assume that he was not an orthodox Stoic (see Dyck 1996: 17–29).

Posidonius (c. 135–51 BC) is another influential Stoic philosopher (see Sedley 2003: 20–4). There was a period, beginning in the second half of the nineteenth century and extending well into the first half of the twentieth, when Posidonius' influence was suspected to have been vast. His interests were encyclopedic, and his views at times seemingly unorthodox. It is easy to see why both his suggestions in the field of moral psychology and his interest in a wide range of areas of knowledge have been put down to an Aristotelian influence. Furthermore, Posidonius' Peripatetic readiness to accumulate empirical truths for the sake of it is not normally something which one finds repeated in Stoicism. It had become fashionable among young members of the Roman elite to go to Greece and round off one's education with philosophical study. Among the Romans who came to Rhodes to hear Posidonius lecture were men like Pompey and Cicero. The latter, perhaps encouraged by Posidonius' interest in historiography, asked the philosopher to write an account of his consulship. The request was respectfully turned down.

Around the bay of Naples there arose, in the first half of the first century, an extended Epicurean culture, which involved Epicurean philosophers as well as members of the Roman elite. Two, for all we know, were particularly influential, Philodemus of Gadara (on whom see Gigante 2002) and Siron. Of the latter we know very little; the young Virgil was associated with him. Philodemus' powerful friend was L. Calpurnius Piso Caesoninus, the owner of the so-called *villa dei papiri* at Herculaneum and a target of Cicero's vicious invective *In Pisonem*, which is a treasure house of anti-Epicurean commonplaces and a rich source for Latin abusive terminology generally. Philodemus' prose treatises, some of which are transmitted to us on charred papyrus scrolls kept in the library of the said *villa* and are being painstakingly reconstructed by papyrologists, have been suspected as influences, with varying degrees of probability, in works of Cicero (see Dyck 2003: 8), Horace's *Ars Poetica* (see Armstrong 1993), and Virgil's *Aeneid* (see the papers collected in Armstrong 2004). His epigrams, whose influence can be detected in most of the major Roman poets of the first century, put Lucretius into context, in that they represent the only other example of poetry written by an Epicurean. In some ways, they are closer to the kind of poetry one would expect an Epicurean to write, given that the activity had been discouraged by Epicurus himself: short, concerned with private, often erotic themes, or expressions and stylized gestures of friendship (see Sider 1997; a collection of texts which use Philodemus is to be found on p. 227–34).

One large gap in our knowledge of the impact philosophy made in the first century is due to the fact that only a few works by Marcus Terentius Varro (116–27 BC) survive (see Rawson 1985: 282–4). We know the titles of many others, and there is a very large number of often very small and tantalizing fragments. Many a complex edifice of a theory on what Varro did and did not do has been built on these uncertain foundations. We know that one of Varro's teachers was Antiochus of Ascalon, whose philosophical stance Varro adopted and retained throughout his life. The *De lingua Latina*, originally in 25 books, of which we have parts of 5–10, is heavily influenced by Hellenistic linguistic theory, a field on which the Stoics were very active. Fragments of the *Menippean Satires*, which combine prose and verse and are often cited as an influence on Petronius' novel *Satyrica*, touch on philosophical topics while commenting on and observing contemporary events. In format they imitate the Cynic philosopher Menippus of Gadara.

Lucretius' didactic poem *De rerum natura*, which is dated by some to the fifties BC, by others to the early forties, is one of the uniquely original creations of Roman culture. Its declared purpose is to rid man of the two anxieties which blight the human condition, the fear of death and the fear of the gods. It was immediately highly influential as

a literary text and eventually became a target for the fathers of the church who wrote in Latin, but made a significant impact as a philosophical text only in the early modern period (see Wilson 2009). As has been argued very plausibly by David Sedley (Sedley 1998: 94–165), its main source is not the extant letters of Epicurus transmitted by Diogenes Laertius, a historian of philosophy of the imperial period, but Epicurus' major work *On Nature*, from which Lucretius selected material, arranged it, and turned it into Latin hexameters. The process was anything but a simple versification, however. Lucretius adopts a style of writing which is modeled on that of Ennius' *Annals*, the historical epic mentioned earlier, which had become a foundational text read by school children by the time of Lucretius. In the *Annals* exemplary behavior of Republican leaders and great dangers overcome collectively, esp. the threat from the Carthaginian empire, were held up for later generations to admire. By casting the *De rerum natura* in a format which resembled that of the *Annals* in terms of style and phraseology, and by alluding to passages from Ennius directly, Lucretius entered into a competition with the world view encapsulated in the *Annals*. For example, in Book 3, where Lucretius is arguing against the fear of death which on the Epicurean view blights the human existence and is responsibly for a larger number of undesirable and misguided patterns of behavior, Lucretius argues that we should not have any anxieties relating to the time following our death, because momentous events which preceded our birth made no impact on our existence either (see Warren 2001). The momentous event cited is the second Carthaginian war, where Rome came close to total defeat at the hands of Hannibal, evoked in a direct verbal allusion to a passage in Ennius' *Annals*. In Ennius these events are truly earth-shattering, however, and Romans, especially in the first century BC which had seen so much civil strife, did look back to them as a time when the Romans together stood up to a powerful external enemy. The overall effect of the Ennian stylization along with the subversion of and critical engagement with the views and attitudes conveyed and sustained by the *Annals* is that the *De rerum natura* presents itself as the successor to and replacement of the *Annals*.

There is some reason to assume that on the level of detail Lucretius' poem is lacking final revision. That its large scale arrangement into six books is as the author wanted it to be is suggested by the way in which every book begins with a carefully crafted prologue, with the first one being a fittingly grand opening to the work and the last one marking the final book (6.92–5), as well as the plan which demonstrably underlies the whole. Book 1 is concerned with the basic physical and metaphysical assumptions of Epicureanism, which is then followed up by introduction to atomic theory in Book 2: that atoms come in different shapes, that these shapes, their primary properties, partly determine how they interact with each other, but that they also have secondary qualities: "accidents". The book ends with a description of the infinite number of worlds which are formed from atoms, and with a comparison of our world to a living being, which is born, ages, and dies eventually. Book 3 is concerned with psychology—the soul is made from atoms, too—and an extended series of proofs that the soul is mortal; it ends in the vivid "diatribe against the fear of death", from which I have drawn my example of Lucretian interaction with Ennius above. Book 4 deals with epistemological topics, explains the nature of perception, and addresses various puzzles associated with perception; it concludes with another diatribe against loving attachment and sexual passion, both of which impede the Epicurean's quest for happiness. Book 5 picks up the theme of the mortality of the world which also features at the end of Book 2, and then develops a theory of evolution and culture which does not presuppose an underlying teleological

plan and is not predicated on the involvement of divine powers or a god-like intellect. Book 6 deals with various potentially terrifying natural phenomena which one might put down to divine influence and provides rational explanations for them. It ends with a graphic description of the great plague in Athens, a long-standing puzzle for interpreters in a poem which is supposed to help its readers find a way to *ataraxia*. The six books form three pairs. The first two are concerned with atoms and atomic compounds, the next two with man, the last two with the world as a whole.

Unlike the other major writer of philosophy in Rome in the first century, Cicero, who is easily the individual from antiquity whom we know best, we know next to nothing about Lucretius. What little biographical information there is comes from the fathers of the church in late antiquity, who disapproved of Epicureanism very strongly and provide information which is too outlandish and too similar to that provided on other perceived opponents to carry much plausibility. The addressee of the work is a Roman aristocrat C. Memmius, who also knew Catullus and whose political career ended in him being exiled to Athens. We have a letter from Cicero to Memmius at Athens (*Fam.* 13.1), written in 51 BC, in which Cicero asks him ensure that the remains of Epicurus' house should not be demolished, but it is difficult to connect the externally known facts about Memmius with Lucretius' rather formal addresses to him in the *De rerum natura*. This lack of independent information on Lucretius is unfortunate, since his use of sources raises questions which we would like to put into context. One is why Lucretius uses a text by Epicurus as his primary source when the Epicurean philosophers had continued to produce substantial writings throughout the Hellenistic period (see Sedley 1998: 62–93). One can of course speculate that Lucretius viewed these writings as trifling footnotes to the only body of Epicurean writings which mattered: Epicurus' own. Another question is why he chooses Empedocles as one of his main models, for example as a reference text to the proem of Book 1. Again one can construct plausible explanations, but a collection of letters in which Lucretius explains his choices to a friend would be preferable. As far as literary models are concerned, there can be no suggestion that Lucretius was isolated, unaware of developments and trends of which we would expect him to be aware, although it is clear that there were many trends which he did not follow (see Fowler 2000). That he did not write in a style comparable to that of his contemporary Catullus but made Ennius his closest model is not a sign of backwardness, as explained above.

One respect in which Lucretius is topical is the representation of political activity and the political process which can be observed in various levels in his work. The first century BC was a period of political disillusionment for many highborn young men. The old mechanisms of rising to high office had broken down, due to the emergence of powerful individuals like Sulla, Pompey, and Caesar. Hence one could find oneself on the wrong side of history, as Cicero did after the battle of Pharsalus in 48 or Horace after that at Philippi in 42. It thus seems no coincidence when Lucretius presents the would-be politician's futile attempts to get elected as the real-life scenario which is allegorized in anxieties about the horrors Sisyphus has to endure in the underworld (3.995–1002). On another level, although Lucretius must be wary of endowing the atoms metaphorically with qualities properly at home in the perceptible world, he can speak of atoms as if they are individuals entering into and contributing to social institutions, and since no compound made of atoms is eternal in the Epicurean view (apart from the gods), there is scope for presenting atoms as being in civil war with each other. The lack of confidence into social institutions thus conveyed is consistent with the political situation in the middle of the first century BC (see Fowler 1989).

An influential recent volume of articles on Cicero is entitled *Cicero the Philosopher* (Powell 1995), thus asserting confidently what has been questioned by many over time, that Cicero can be called a philosopher. While it is true that he did not devise any doctrines of his own, it is hoped that already the introduction above gave an indication that this is not a helpful way to approach Cicero's philosophical works, since it is not appropriate to Cicero's own aims.

Cicero was a writer of philosophical works and a leading political player of his time, in that respect comparable to Seneca and Marcus Aurelius. The personal contact with philosophers which sparked Cicero's lifelong interest in the subject dates from early in his life, before his career as an advocate and politician began. These men were Philo of Larissa and Antiochus of Ascalon. The idea that rhetoric and philosophy should be reunited is almost proverbially associated with Cicero, and he is likely to have developed it on the basis of Philo's teachings. It first occurs, somewhat out of context, in Cicero's earliest extant work, a rather derivative treatise on how to find rhetorical arguments, the *De inventione*. Later in his life he was to articulate and develop the idea further, very probably in a way which represented an extension of the teachings of Philo, notably in his rhetorical *opus magnum* on the perfect orator (*De oratore*, 55 BC), where he provides a lengthy digression in Book 3 in which he tells the story of how historically rhetoric and philosophy became separated and need to be reunited. This is significant for the purposes of the present chapter in that it represents one important dimension of the impact philosophy made in Rome. Cicero became the leading advocate of his time, the king of the courts as he himself put it (*Fam.* 9.18.2), so much so that none of the speeches of his contemporaries have come down to us, and while there cannot have been a shortage of critics who thought that the emphasis on philosophy was a contrivance, irrelevant to the actual forensic practice, it must have made some impression on young aspiring orators. The rhetorician Quintilian, at the end of the first century AD, would later promote a neo-Ciceronianism, with an emphasis on philosophical training as a component (see especially *Inst.* 2.15–21 and 12.1–2); however, he was immediately challenged by contemporaries, notably Tacitus in his *Dialogus de oratoribus*, who no doubt echoed criticisms already raised by Cicero's contemporaries. For Cicero, one particular exercise represented the main channel through which philosophy could enter into rhetoric and oratory. An influential rhetorician of the second century BC, Hermagoras of Temnos, had drawn a distinction between particular questions, which are the subject of trials (for example, "Was it right for x to kill y?"), and associated general questions which are devoid of references to individuals, time, and place. Cicero suggests that both during training and in the courtroom the orator should switch freely between general and particular question, and that especially the handling of general questions would profit from philosophical expertise.

After the *De inventione*, Cicero's published writings for the next three decades consisted of speeches given in criminal and private courts, and on the political stage; they include occasional references to philosophy and will be discussed briefly below. In the late fifties, during the so-called first Triumvirate when Cicero was largely marginalized politically, he wrote the *De re publica* from which we started. There followed the Roman civil war, during which Cicero sided with Pompey, who was eventually defeated, and the dictatorship of Caesar until the latter's assassination in 44 BC. When Cicero returned to the writing of philosophy in 45, he did so after another extended period of political irrelevance as well as personal misfortune, the death of his beloved daughter and the divorce

from his wife of thirty years, Terentia. Within a very short period of time, he produced a substantial cycle of philosophical works. The first of these was the *Hortensius*, modeled on Aristotle's *Protreptikos*, which argues for philosophy as a way to happiness and on the need for reason to overcome the passions; St. Augustine, to whom it was still available in its entirety, cites it as a key influence in his conversion to Christianity. Then came the *Academica*, concerned with the epistemological debates between Stoics and skeptical Academics in the Hellenistic period. The *De finibus* is concerned with ethical theory, the *Tusculanae disputationes* with the application of ethical theory to real-life problems. In the area of physics, *De natura deorum*, *De divinatione*, and *De fato* were completed. Two treatises on special issues within the field of ethics (*Cato maior* on old age, *Laelius* on friendship) follow, before Cicero turns once more to elementary ethical questions with the *De officiis*, mentioned already above. *De officiis* was to be a hugely influential work, serving as a model for a work by St. Ambrose and achieving such a wide distribution in the middle ages that over seven hundred manuscripts are extant. *De officiis* was the second book to be printed after the bible.

It is facile to explain Cicero's turn to philosophy as a displacement activity, but once more he is his own commentator and provides explanations for his project. While he acknowledges that time has become available to him which he did not have in the past, he cites two other motivations. One is that before he got to work there had not been philosophical writings in Latin prose with which the Romans could be satisfied, a claim which we cannot verify but which is very plausible. The second one is the hope that fame for himself and public benefits for his reading audience will accrue (*Acad.* 1.11ff.); the latter point is naturally compatible with the suggestions about the value of philosophy which we encountered earlier in connection with the *De re publica*.

Cicero's self-commentary does not end there. He gives various characterizations of his philosophical writings which suggest that they are heavily derivative of Greek sources (*Att.* 12.53.2). Despite the fact that Cicero tends to be at his least convincing in his expressions of modesty, for a long time scholars took these declarations at face value and mined Cicero's works for Greek "source material", which, or so was the assumption, could be made accessible if one reversed the process of clothing it into Latin and identified the various mistakes and misrepresentations which Cicero's ineptitude had introduced. It is only fairly recently that this caricature of Cicero's production, and the tasks it poses, has been recognized for what it is.

At the beginning of *De finibus* Cicero tells us a bit more about what he hopes to achieve in his philosophical treatises; the passage also adds to our understanding of how Cicero uses the format of the dialogue and of the contribution which Cicero's occupation as an advocate makes. He says, speaking in his own voice:

> What of it, if I do not perform the role of a translator, but take charge of the utterances of those whom I consider sound (*tuemur ea, quae dicta sint ab iis, quos probamus*), while I contribute my own judgment and order of composition (*eisque nostrum iudicium et nostrum scribendi ordinem adiungimus*)? What reason does anyone have to prefer Greek writings to those which are brilliant in formulation and not just rendered from the Greek?
>
> (*Fin.* 1.6)

Cicero pointedly contrasts what he does with the activity of a translator, and he does this using terminology which is appropriate to an advocate acting on behalf of a client

and, eventually, composing a speech on his behalf which serves his client's purpose. (It is a separate question of course if we think that Cicero meets his own standard.) When Cicero says that he acts on behalf of (*tuemur ea*) the statements of the philosophers whose views he represents, that does not mean that he defends them by adopting them—he does not endorse the views which he represents personally, and in any case *Fin.* contrasts opposing views. When he says that those whose views he represents enjoy his approval (*quos probamus*), this means that he respects them as serious contributors to a substantial debate. When he then announces that he applies his "judgement" (*iudicium*) to the views in question, this is, as is clear from the immediately following phrase (*nostrum scribendi ordinem*), the judgment of the skilful and seasoned composer of speeches; in other words, *iudicium* is a term belonging the sphere of rhetorical theory and literary criticism (so Patzig 1979: 308–9). Recent studies have shown that the hermeneutical strategies which we employ when studying Cicero's speeches do indeed yield richer and more plausible interpretations when applied to Cicero's philosophical works than the rather sterile hunt for misunderstandings and distortions introduced by the supposed Roman blunderer.

Within Cicero's wide-ranging philosophical writings, there is a core which is concerned with moral and political questions. As someone who did not come from a family whose members had held public office for many generations but who embraced traditional Roman values to a higher degree and in a more reflective way than many aristocrats, Cicero interrogated Roman values, perceived them as in need of elucidation and justification, and used the categories of thought and conceptual tools of Greek philosophy for that purpose especially in the *De re publica*, the *De legibus*, and the *De officiis*. It seems no coincidence that a project which was in part driven by a sense of alienation and a commitment to traditionalism was undertaken by a "new man".

Philosophy plays a role in Cicero's other prose writings, his letters and his speeches, and these help to put the philosophical works into perspective. Roman politicians and advocates were very careful to avoid references to Greek culture generally in public pronouncements, and Cicero would avoid Greek words in his speeches except in disparaging contexts. Accordingly, references to Greek philosophy would only be made in particular circumstances. In his invective against Piso (*In Pisonem*), who was mentioned above as a patron of Philodemus, Cicero can be seen to appeal to Roman resentment against philosophers and Epicureanism in particular, and misses no opportunity to use stereotypes like that all Epicureans are gluttons, devoted solely to the pleasures of the flesh, unwilling to contribute to the community and so on. The only instance of a use of philosophy which is thorough-going but positive is Cicero's defense speech for Milo, of which we only have a strongly revised version (the speech which Cicero delivered in court was unsuccessful). During the politically very unstable period of the 50s BC, Clodius and Milo were mortal enemies, both competing for high public office. In a violent encounter of Milo's and Clodius' men on a country road in 53 BC, Clodius was killed, and Milo was subsequently put on trial. On such occasions Roman orators frequently used the so-called *cui bono* argument in order to establish or disestablish motive. Having argued that Clodius had every reason to want Milo dead because he stood between him and electoral success, Cicero then argued that the reverse was not true. That was so because Milo was effectively like a Stoic sage, unmoved by the kind of considerations which made Clodius want to kill him (see Dyck 1998). This daring move, if it was actually performed in court, had the additional benefit of furnishing an explanation why Milo was not as engaged as an accused in his precarious position would

usually be (viewing the whole trial as a charade, Milo was unwilling to play the game and appears to have displayed a certain nonchalance). The peculiar nature of the extant speech, however, does not allow for further inferences regarding the acceptability of such arguments in a public court. The picture is completed by the various collections of Ciceronian letters which are extant, including some which were sent to Cicero by other people. Cicero may have written them with an eye to publication, but they are primarily private documents. In them Cicero freely switches between Greek and Latin, as well as makes frequent philosophical in-jokes which put the scene-setting 'frames' of his dialogues into context (see Griffin 1989).

Some literary genres which were popular in first century Rome do not readily admit philosophical content: for example love elegies, which were in many cases first person poems written by a man and addressed to a girl in an attempt to woo her and therefore turned on themes conducive to that purpose. The situation is different for other genres. Aspects of Virgil's *Aeneid* have been explained in terms of philosophical influences, for instance the notion of fate which is invoked in a speech by Jupiter early in Book 1 where he seeks to assure his daughter Venus, mother of Aeneas, that the Trojans are indeed destined to establish a new empire. Homer's epic poems, in many respects Virgil's primary sources, did not use such a notion of fate, and the main tenets of Stoicism enjoyed broad familiarity among the Roman elite by the time Virgil wrote. Elsewhere in the *Aeneid* more localized influence of philosophical thought is detectable. The depiction of the fall of Dido and the emotional unraveling of the queen of Carthage when she realizes that Aeneas will leave her to continue his journey to Italy has been linked to philosophical ways of understanding emotions (see Gill 2004). Book 6, describing Aeneas' descent into the underworld, is famously a pastiche of so many sources that it becomes difficult to demonstrate the presence of any particular influence. Yet apart from Platonic underworld descriptions as they feature in the myths which conclude the *Gorgias* and the *Republic*, which must have been used, a passage where Anchises suggests that there are rewards in another life for the political leaders of the state is likely to draw on the ending of Cicero's *De re publica*, where a similar prospect is held out.

A writer whose engagement with philosophy was deep and complex, but in ways which resist systematic exposition, was Horace (65–8 BC). The genres in which he wrote—satire, lyric, iambic poetry—all allow for a personal voice, even if the speaker often is not "Horace". From the beginning, that is, the *Satires* and the *Epodes*, his work shows a concern with moral issues like the human inability to be satisfied, the value of friendship, and the right attitude to life (and death). In his outlook, Horace is a self-declared Epicurean, but not in any dogmatic sense—dogmatism does not suit him, and he has no interest in expounding views, let alone doctrines, or in making coherent arguments. Partly because the conventions of his chosen genres dictate it, partly because it comes to him naturally, Horace is famous for his gliding transitions, for thoughts connected loosely and moving by association. That he is an overtly political poet—the state of Rome frequently features in his poetry—sits as oddly with his Epicureanism as it sits with his Callimachean esthetics (see Fowler 1995), especially in his later work, which shows an awareness that Horace is becoming part of an increasingly nationalized Augustan culture. In his so-called Roman odes (*Carm.* 3.1–6), Horace combines an analysis of the moral state of Rome in categories which are similar to those employed by the late-Republican historian Sallust (3.6) with an Epicurean longing for detachment and spiritual tranquility (3.1) and a Stoicizing depiction of virtue in a speech delivered by the goddess Juno (3.3). In the first book of his *Epistles*, published after books 1–3 of

the odes, Horace treats a variety of philosophical topics, in a manner not dissimilar to that of the *Satires*, but he does so through techniques and in a voice which constantly remind one of the poet-philosopher Lucretius. Another important strand of philosophical thought in Horace, which influences content as well as the characterization of the speaker persona, is cynicism.

In the first and second centuries AD, philosophy flourished in Rome. Lucan (39–65 AD) wrote his epic poem on the civil war between Pompey and Caesar, in which the Stoic Cato wrestles with the problem that the view of the dominance of reason is hard to sustain when faced with a fate which is not beneficial to the world as a whole, let alone to individuals in it. Otherwise Seneca's treatises as well as his tragedies, which may be seen as counterparts to the treatises in their explorations of the extremes of human emotion, stand out as examples of Stoic writing, as do the *Meditations* by the emperor Marcus Aurelius, although he wrote in Greek. After a succession of less prominent figures, many of whom produced works of an encyclopedic nature, two names stand out at the end of antiquity, namely St. Augustine and Boethius. Apart from writing works of his own as well as commentaries, Boethius composed a translation of the Aristotelian Organon into Latin. After the works of Cicero and Seneca it provided another major original impulse in the creation of a Latin philosophical vocabulary, which was to be fundamental for medieval philosophy.

References and further reading

Three fine articles on the impact philosophy made in Rome, and on models one might use for explaining this impact, are Harder (1929), Griffin (1989), and Long (2003). Rawson (1985) gives a stimulating appraisal of late-Republican intellectual culture and the place of philosophy in it.

Armstrong, D. M. (1993) "The Addressees of the *Ars Poetica*," *Materiali e* Discussioni 31: 185–230.

Armstrong, D. M. (ed.) (2004) *Virgil, Philodemus, and the Augustans*, Austin: University of Texas Press.

Courtney, E. (1993) *The Fragmentary Latin Poets*, Oxford: Oxford University Press.

Courtney, E. (1999) *Archaic Latin Prose*, Atlanta: Scholars Press.

Dyck, A. R. (1996) *A Commentary on Cicero, De Officiis*, Ann Arbor: University of Michigan Press.

Dyck, A. R. (1998) "Narrative Obfuscation, Philosophical Topoi, and Tragic Patterning in Cicero's *Pro Milone*," *Harvard Studies in Classical Philology* 98: 219–41.

Dyck, A. R. (2003) *Cicero—De Natura Deorum Book 1*, Cambridge: Cambridge University Press.

Fowler, D. P. (1989) "Lucretius and Politics," in M. Griffin and J. Barnes (edd.) *Philosophia Togata 1*, Oxford: Oxford University Press: 120–50.

Fowler, D. P. (1995) "Horace and the Aesthetics of Politics," in S. J. Harrison (ed.) *Homage to Horace*, Oxford: Oxford University Press: 248–66.

Fowler, D. P. (2000) "Philosophy and Literature in Lucretian Intertextuality," in *Roman Constructions—Readings in Postmodern Latin*, Oxford: Oxford University Press: 138–55.

Gigante, M. (2002) *Philodemus in Italy—the Books from Herculaneum*, Ann Arbor: University of Michigan Press.

Gill, C. (2004) "Character and Passion in Virgil's *Aeneid*," *Proceedings of the Virgil* Society 25: 111–124.

Griffin, M. (1989) "Philosophy, Politics, and Politicians at Rome," in M. Griffin and J. Barnes (eds.) *Philosophia Togata I: Essays on Philosophy and Roman Society*, Oxford: Oxford University Press: 1–37.

Griffin, M. T. (1995) "Philosophical Badinage in Cicero's Letters to His Friends," in J. G. F. Powell (ed.) *Cicero the Philosopher*, Oxford: Oxford University Press: 325–46.

Harder, R. (1929) "Die Einbürgerung der Philosophie in Rom," *Die Antike* 5, 291–316.

Kahn, C. H. (2001) *Pythagoras and the Pythagoreans—a Brief History*, Indianapolis and Cambridge: Hackett.

Long, A. A. (2003) "Roman Philosophy," in D. N. Sedley (ed.) *The Cambridge Companion to Greek and Roman Philosophy*, Cambridge: Cambridge University Press: 184–210.

Martin, R. H. (1976) *Terence—Adelphoe*, Cambridge: Cambridge University Press: 20–3.

Patzig, G. (1979) "Cicero als Philosoph, am Beispiel der Schrift 'De finibus'," *Gymnasium* 86: 304–322.

Powell, J. G. F. (1995) *Cicero the Philosopher*, Oxford: Oxford University Press.
Powell, J. G. F. and North, J. A. (eds.) (2001) *Cicero's Republic*, London: Institute of Classical Studies.
Rawson, E. (1985) *Intellectual Life in the Late Roman Republic*, London: Duckworth.
Sedley, D. N. (1998) *Lucretius and the Transformation of Greek Wisdom*, Cambridge: Cambridge University Press.
Sedley, D. N. (2003) "The School, from Zeno to Arius Didymus," in B. Inwood (ed.) *The Cambridge Companion to the Stoics*, Cambridge: Cambridge University Press: 7–32.
Sider, D. (1997) *The Epigrams of Philodemus*, New York and Oxford: Oxford University Press.
Skutsch, O. (1985) *The Annals of Quintus Ennius*, Oxford: Oxford University Press.
Warren, J. (2001) "Lucretius, Symmetry Arguments, and Fearing Death," *Phronesis* 46: 466–491.
Wilson, C. (2009) "Epicureanism in Early Modern Philosophy," in J. Warren (ed.) *The Cambridge Companion to Epicureanism*, Cambridge: Cambridge University Press: 266–86.
Zetzel, J. E. G. (1995) *Cicero: De Re Publica. Selections*, Cambridge: Cambridge University Press.

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Part V

PHILOSOPHY IN THE EMPIRE AND BEYOND

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38
ROMAN STOICISM

Ricardo Salles

The term "Roman Stoicism" refers to the Stoicism of the first two centuries AD in Rome, the center of philosophical activity at the time. For many years, scholarly interest in this part of Stoicism had been chiefly instrumental: Seneca, Epictetus and Marcus Aurelius—the three most famous Roman Stoics nowadays—have been read as sources for early Stoicism and only insofar as they could shed light on early Stoic ideas. The existing differences between them and their early predecessors were not understood as genuinely Stoic developments, but as the expression of external influences alien to the true spirit of Stoicism. This conception of Roman Stoicism has been changing in the last three decades to be gradually replaced by the notion that at least these three authors are original philosophers that transformed Stoic thinking in several areas of great importance. Neither of these two opposed lines of interpretation is unqualifiedly true because Roman Stoicism is a highly complex mixture of innovation and conservatism. In fact, it is extremely difficult to determine whether on the whole it is more innovative than conservative. In what follows, I seek to bring this out by giving a brief outline of the main figures of Roman Stoicism and compare it to early Stoicism in four basic areas: ontology, physics, logical theory and ethics.

The main figures

Seneca (c. 1–65 AD), Epictetus (c. 55–c.135 AD), and Marcus Aurelius (121–180 AD) are the three dominant figures of Roman Stoicism. But they are by no means the only important ones. Especially significant is Hierocles, active around 100 AD. He is the author of a treatise dealing with *oikeiōsis*, the *Elements of Ethics*, crucial for understanding this Stoic concept. Although Hierocles' treatise is not extant as a whole, the fragments that survive have been newly re-edited and have now become one of the main sources of information on Stoic *oikeiōsis* (Bastianini and Long 1992). In Hierocles, more than in any other Stoic, we find a detailed account of how our moral evolution is a process in which we naturally expand our concern for ourselves to increasingly wide domains: body, family, neighbors, tribe, city, country, culminating in the widest domain of universal humanity. In this theory, the object of our concern varies from stage to stage but each stage is nonetheless best understood as part of single and continuous outward movement of the self by which it increases its involvement with other people and the social and external world in general. Equally important is Cornutus, a contemporary of Seneca. Born in Libya and the teacher at Rome of the poets Lucan and Persius, he is known primarily for his *Compendium of Greek Theology*. But we also know that Cornutus made significant contributions in the field of ontology in two of his lost works:

On Properties (Sedley 2005: 117) and his commentary on Aristotle's *Categories*, cited by Simplicius in his own commentary on this work (*in Cat.* 27–8 Kalbfleisch). In these works, he appears to have attacked Aristotle's metaphysical system along with his contemporary fellow Stoic Athenodorus of Tarsus. Cleomedes should also be mentioned as an important figure of Roman Stoicism. From him we have a major treatise on Stoic astronomy and scientific method, the *Heavens*, that may be dated between 170 and 200 AD (Bowen and Todd 2004: 1–4). In contrast with Aristotle, the early Stoics had argued that the cosmos was surrounded by an infinite void. This view was criticized by later Peripatetics and Stoicism owes to Cleomedes the formulation of a detailed response to these Peripatetic objections against an extra-cosmic void. In addition to Hierocles, Cornutus and Cleomedes, we must cite Musonius Rufus and Philopator. Musonius was the teacher of Epictetus and his work survives only in a limited number of fragments. But we know that he possessed detailed knowledge of early Stoic doctrines, that he accepted early Stoic views on providence and universal causal determinism, and that he exerted a crucial influence on Epictetus' ethics, and notably on his ideal of harmonizing our life and actions with the order of the cosmos. Of Philopator, on the other hand, we know that he was active between 80 and 140 AD and that he wrote a treatise *On Fate*, which, according to a recent interpretation, marked a entirely new development in Stoic thinking about the compatibility of moral responsibility with determinism (Bobzien 1998: 387–394, Salles 2005a: 67–89).

One complication for comparing Roman with early Stoicism comes from the form in which the works of the three dominant figures of Roman Stoicism have come down to us. With the exception of some treatises by Seneca—notably, the *Natural Questions*—the extant works of all three were not at all intended as systematic expositions of doctrines and theories. In Seneca, much of his thought has reached us through his *Letters*. These are often didactic in nature, but they do not aim at conveying theoretical matters with the precision required in a formal account of them. In the case of Epictetus, half of his *Discourses* are lost and the *Manual* is a condensed summary of central ideas developed in the *Discouses*. Their author, however, is not Epictetus himself, but Arrian, his pupil. And Arrian's intention was to rehearse the informal discussions conducted by Epictetus with various persons, and not to convey the formal teaching that went on in his school. In the case of Marcus Aurelius, his *Meditations* were not even intended to convince or commit anyone. They were written as a private record of thoughts addressed solely to himself. They are chiefly "spiritual exercises" whose purpose was to improve himself as a Stoic agent by the repeated formulation and expression of Stoic ethical ideals (Rutherford 1989: 13, Hadot 1992: 52–68, Cooper 2004: 335–336). For all three, there is good evidence that they were trained in systematic Stoic philosophy. But given the form of their extant works, we can have practically no direct knowledge of how they handled specific Stoic doctrines.

Ontology

The most distinctive contribution of Stoicism to ontology is a theory that replaces the category of "being" (*to on*) by the category of "something" (*ti*) as the highest ontological genus. Call this theory O_1. According to O_1, certain items in ontology are something as opposed to nothing at all, but are not, however, things that exist in a full sense. In this theory, this highest ontological genus, the genus of something, is divided into, on the one hand, the species of being which comprises all and only bodies, and, on the other,

the species of incorporeals, which comprises certain things that, according to O_1, cannot be corporeal but are something nevertheless: void, place, time, and sayables (*lekta*), that is, the meaning of linguistic predicates. In consequence, these four "canonical" incorporeals, as they are sometimes called (Brunschwig 1988: 134–145), are somethings but not beings. This may be illustrated as shown in Figure 38.1.

The *scala entis* in O_1 Something (ti)	
Beings (bodies)	Incorporeal somethings (void, place, time, and lekta)

Figure 38.1

Certain items, however, such as universals, were considered as nothing at all and put outside the highest genus of something. They were relegated to the realm of "not-something" or "nothing" (*ou ti*), which in some sense is not itself an *ontological* category since it comprises items that, according to the Stoics, do not belong in any way to reality. This applies both to universals of natural kinds (man, horse) and to fictitious universals (the Syrens). But universals were not the only nothings according to O_1. Certain fictitious *individuals* such as the Cyclops Polyphemus and the giant Tityos were also included in this category. This suggests the diagram shown in Figure 38.2 (see Brunschwig 1988: 99–103):

The nothings of O_1 Nothing			
Universals		Fictitious individuals	
Natural	Fictitious		

Figure 38.2

The criterion employed by O_1 for determining the place of anything within this scheme was twofold: (1) whether it has extra-mental reality, (2) whether it is a body (see Brunschwig 1988: 95 and sections III and IV). If it satisfies (1), but not (2) it is an incorporeal something, if it satisfies both (1) and (2) it is something but also a being, whereas if it satisfies neither (1) nor (2) it is nothing at all. In holding these two criteria, the Stoics were taking issue with Platonism and, in particular, two central theses of his metaphysics: that corporeality is not the distinctive mark of beings, and that at least some universals not only have extra-mental reality, but also are more substantial, enduring and stable entities than bodies.

O_1 is well attested in our sources. But there were also two other competing theories within Stoicism that need to be mentioned since the choice between them seems to be a question that was of interest to at least some of the Roman Stoics. The second theory—O_2—reinstates being, or "what is" (*quod est*: Seneca quoted below) as the supreme genus. And it postulates as its first division the two subgenera of O_1: bodies, on the one hand, and incorporeals, on the other, exemplified by void and time—two of the four canonical incorporeals in O_1—and considered "quasi-beings" (Seneca quoted below). Thus, O_2 reverts to the classic conception, found in Plato, according to which being, or substance (*ousia*), is the highest genus (see Figure 38.3). In our sources, there is no information as to how O_2 classifies universals and, in general, the nothings of O_1.

The *scala entis* in O_2 Being ("what is")	
Bodies	Incorporeals: "quasi-beings" (void, time)

Figure 38.3

In general, the primary difference between O_1 and O_2 lies in the use by former of corporeality as a necessary condition for being, and the apparent rejection of this anti-Platonic condition by O_2: insofar as O_1 uses this criterion, it denies to incorporeals the status of beings, but these incorporeals are allowed in the realm of being by O_2 precisely because corporeality, according to O_2, is not a necessary condition for counting as a genuine being.

The third theory—O_3—shares some of its crucial features with O_1 and O_2. Like O_1, O_3 establishes Something as the highest genus. Its first division, however, is not into beings and incorporeal somethings, as in O_1, but into beings and not-beings, a category that includes the fictitious individuals of O_1. And like O_2, O_3 divides the subgenus of being into bodies and incorporeals (regarded by both theories as "quasi-beings"):

The *scala entis* in O_3 Something			
Beings		Not-beings (fictitious individuals)	
Bodies	Incorporeals (quasi-beings)		

Figure 38.4

The primary difference between O_1 and O_3 is twofold: O_3 (like O_2) rejects corporeality as a necessary condition for being, and this allows it to establish incorporeals as some kind of being. But O_3 also appears to question the notion we find in O_1 that items devoid of extra-mental reality are nothing at all. At any rate, O_3 suggests that some mind-dependent fictitious indivuals *are* something rather than nothing. In fact, one recent scholar has argued that in O_3 we find, probably for the first time in ancient philosophy, the idea of purely intentional objects of thought, that is, objects which we can conceive of, but that do not belong to the reality outside our mind and our representation of them (Caston 1999: 150–158).

It is probable that these three theories were designed by different Stoics as competing schemes. But the order in which they appeared—and in which, therefore, Stoic ontology evolved—is not certain. According to one leading interpretation, the position of Seneca differed from that of the early Stoics inasmuch as O_1 is the theory originally proposed by the early Stoics and O_2 is adopted by Seneca against O_1 and O_3, his main worry with these being the postulation of "something" as the highest ontological theory (Brunschwig 1988 and 2002 supported by Vogt 2009, questioned by Mansfeld 1992: 84 n.22 and 99 n.48, and by Caston 1999: 151 n.10, 157 n.24 and 175–176). The central evidence comes in passage from *Letter* 58 (sections 12–15):

> That generic genus "what is" has nothing above itself. It is the principle of all things: they fall under it. The Stoics want to place above this a yet further, more primary genus [= O_1 and O_3]. "What is" I divide into these species: beings are either corporeal or incorporeal. There is no third kind [=O_2] (…) Some Stoics think that e first genus is "something", and I shall explain why they think so. In the world's nature, they say, some things are, some are not. Yet even these things which are not are included in the world's nature—things which strike the mind, such as centaurs, giants and whatever else, formed by false thinking, begins to have some image although it has no subsistence [=O_3].
>
> (translation by Sedley 2005: 124)

Thus, the ontology of Seneca seems to differ in crucial respects from early Stoic ontology. However, O_2—the theory adopted by Seneca—may have its origin not in Seneca himself, but in another Roman Stoic. Cornutus is a possibility, as has been argued by Sedley 2005. But in any case, Seneca embraced O_2 against the central and early Stoic notion in O_1 and O_3 that being is not the highest ontological genus. In this respect, the position of Seneca is conservative in its connection with Platonic ontology, but it is innovative within Stoicism. In fact, it has been recently argued that "Seneca is almost certainly not alone among [Roman] Stoics in his constructively conciliatory attitude to Platonist Metaphysics" (Sedley 2005: 140).

We know from Syrianus's *Commentary on Aristotle's Metaphysics* (at 105,19–106,5–8 Kroll) that, after Seneca, ontological theories were put forward by Stoics such as Longinus and Antoninus. Each of them appears to depart from at least one of the basic theories O_1, O_2 and O_3. Syrianus' testimony, however, is not detailed enough to ascertain with any degree confidence whether these later theories were just slight variations of the earlier ones or different theories altogether.

Physics

In Stoicism, "physics" is the name of the discipline that deals with the nature of the cosmos as a whole, of its governing principle, god, of its basic parts, the physical elements (fire, air, water and earth), and of the causal interaction between these parts at all levels, from the reciprocal interaction between the elements themselves to the interaction between such complex bodies as ensouled living things, which are made of them. Thus, Stoic physics encompasses an extremely wide range of special sciences: cosmology, theology, astronomy, meteorology, particle physics, chemistry, biology and psychology. In what follows I limit myself, first, to theology and, secondly, to the general methodological question of why should one study physics at all.

Two points of contrast between early and Roman Stoic theology have often been suggested. One is that in early Stoicism god is an impersonal and corporeal being identical in many respects to the cosmos as a whole, whereas in Roman Stoicism the personal aspects of god and his providential care for humans and living things are highlighted. The other contrast is that the early Stoic god has unlimited power: there is no possible obstacle to what he can do, and if there is anything that necessitates what he actually does is his own rationality. But in Roman Stoicism this is not so. For we find in it a conception of god in which there are certain things over which he clearly has no control. I shall argue, however, that these supposed differences are less sharp than they may initially seem.

Early Stoic theology is pantheistic in holding that god is a corporeal being that permeates the cosmos. This pantheism is the result of two connected about the nature of the cosmos and of causation: (i) the cosmos is intelligently organized insofar as each of its parts, however small, has a purpose and a meaning within the whole and this requires the action of an organizing mind upon each part of the cosmos, but (ii) causation, in any form, requires contact and contact is only possible between bodies; in consequence, from (i) and (ii), god, as the entity responsible for the organization of the cosmos, must make contact with everything and must be a corporeal entity. From this perspective, god is the soul of the cosmos, the body of which is ultimately the formless prime matter that the Stoics identify with the cosmic "passive principle". The transition from the thesis that god is omnipresent in the cosmos to the stronger thesis that god and cosmos are identical usually rests on the assumption that the ruling part of an entity fixes its identity. As has been shown in a recent study, however, this dualistic form of pantheism is not incompatible with theism. Actually, it seems to have merged into it as early as Zeno, the founder of Stoicism who calls god a "father" and a "craftsman" (Algra 2007: 36–42). To be sure, Zeno's theism is restricted and qualified in several respects. One especially significant restriction is that he is devoid of emotions. This is a substantive difference between his theism and traditional, mythological, theism. But Zeno's god is endowed with rationality, intentions and purposes, three basic features of the concept of a person. These features are also clearly expressed in Cleanthes' *Hymn* and are indeed the most prominent in the Roman Stoic god (see Seneca *On Providence* 5.6–8 and Marcus Aurelius 5.8.2). A restricted theism is also detectable in Chrysippus and his treatment of traditional religious practices (Algra 2009). Now, just as early Stoic pantheism is close to some form of theism, so too Epictetan theism does not go beyond the restricted form of theism we find in early Stoicism. In particular, as Algra maintains, Epictetus' often personalized talk of god does not imply anything more than the belief that god is provident, rational and "as such he is what, or whom, we should love and follow" and

his attitude to prayer does not seem to betray any stronger form of theism (Algra 2007: 47 and 51–52). A similar restricted form of theism is also present in Seneca and Marcus Aurelius (Rutherford 1989: 209–212, Long 2002: 21–27).

An analogous conclusion may be drawn in connection with the issue of god's power. There is clear evidence—chiefly from Epictetus—that in Roman Stoicism his power is limited. In particular, god cannot interfere with our acts of assent: whether or not I give assent to an impression only depends on me in the sense I will be the only cause of my assenting or of my not assenting to it, a causal nexus with which god cannot interfere (*Dis*. 1.6.40). Similarly, the fragility of our body is something that god would have avoided if he could, but that he could not avoid insofar as this fragility is a consequence of the nature of the materials our body is made of (*Dis*. 1.1.7–11). Hierocles and Seneca also suggest similar conceptions of the power of god in connection with cosmological issues (discussed in Long 1996: 302–4 and Dobbin 1998: 70–1). But is this a point of contrast between early and Roman Stoic conceptions of god? For is the power of the early Stoic god really unlimited? The main evidence for its unlimitedness is perhaps Diogenes Laërtius 7.135–6. It relates to the field of cosmogony: the matter that receives the action of god at the cosmogony is described as "serviceable to himself" suggesting that there is not anything in its nature that could restrict the range of things into which god could transform it, in clear opposition to the recalcitrant material that the demiurge of Plato's *Timaeus* has at his disposal at the cosmogony. But there is also evidence that the power of the early Stoic god is limited in another field of cosmology: the theory of conflagration. In Chrysippus, the conflagration is the best possible state of the cosmos, but it cannot last indefinitely since no fire can burn forever. To do so, the fire of the conflagration would need an infinite amount of fuel. But this is impossible since the quantity of matter in the Stoic world is finite. This poses a limitation to the control by god of the duration of the conflagration (Salles 2005b: 68 n.17 and 75–6). Thus, the available evidence is somewhat contradictory on whether the power of the early Stoic god is or is not limited in the field of physics. And, therefore, we cannot ascertain whether on the whole the Roman Stoics departed from the early Stoics on the question of the power of god.

In astronomy, meteorology and chemistry, Roman Stoicism made important contributions through at least two major treatises that have come down to us: Cleomedes' *Lectures on Astronomy* and Seneca's *Natural Questions*. Also, classic themes in early Stoic physics such as time, causation, the elements and mixture are often alluded to in Marcus Aurelius. I shall not examine whether their position of these special issues is innovative (for which see Bowen and Todd 2004: 1–17, Inwood 2002, Sorabji 2007 and Nasta 2007). Let me deal instead with how important the study physics as a whole was to Seneca. As will be seen, some of his general ideas on this question are very close to early Stoicism.

Seneca appears to offer in different places different reasons for studying physics (Inwood 2009). One of these reasons is that all the disciplines constitutive of philosophy are valuable subjects of study precisely as the parts of philosophy are an integrated, and intrinsically valuable, body of knowledge. In this sense, the study of physics is valuable as a necessary condition for studying philosophy as a whole (*Letter* 89–90). A second reason is that even though the answer to very specific ethical questions (for example, why do bad things happen to good men if the world is governed by providence?) may not require demonstrative knowledge of certain truths of physics, the overall peace of mind and right attitude to life that ethics is supposed to provide us does require extensive and comprehensive demonstrative knowledge of physics. Thus, the study of physics is

valuable here again as a necessary means to complete a further goal: in this case, a certain state of mind and a right attitude to life. A third reason, however, is stronger in that it gives to physics an intrinsic value: the study of physics is worthwhile in itself because it suits our nature, which is designed for contemplation and theoretical knowledge in general. In other words, theoretical knowledge in general is constitutive of human nature and human nature is an end intrinsically valuable, therefore, theoretical knowledge, including physics, is intrinsically valuable. This is a central idea that we find in early Stoics—"the rational animal was created by nature fit for action and contemplation" (Diogenes Laërtius 7.130)—and that appears prominently in other Roman Stoics, for example Epictetus (*Dis*. 1.6.19–22). As Inwood explains:

> Seneca recognizes two quite different reasons for studying physics and for attending to its doctrines, reasons which might well seem to be opposed to each other. Studying physics provides direct instrumental support to what we might call the enterprise of ethics, but it also fulfills something very important and fundamental in our natures, the built-in drive for contemplation of nature.
>
> (Inwood 2009: 214–5)

This double motivation is conspicuous in the *Natural Questions* and the second of them is a crucial point of agreement between him and early Stoicism.

Logical theory

Logical theory is often regarded in Stoic scholarship as alien to the main orientation of Roman Stoicism. This is supposed to mean a major point of contrast between Roman and early Stoics. Recent research on the subject, however, has revealed that this alleged difference is highly dubious (Barnes 1997, Crivelli 2007). Some Roman Stoics attached as much importance to logical theory as the early Stoics did, the main difference being only that in Roman Stoicism logical theory has a purely instrumental value, whereas in early Stoicism it may be pursued not just for its utility, but also for its own sake.

Logical theory is the study of concepts such as validity and proof. Therefore, knowing logical theory is different from merely having the skill to produce individual valid arguments or demonstrations. The former requires in addition the ability to *define* what valid arguments are in general terms. Evidence that Roman Stoicism was concerned with this matter may be gathered from Epictetus. At *Dis*. 3.2, Epictetus claims that there are three areas in which anyone who wishes to become a good person should exercise:

> There are three areas of study, in which a person who is going to be good and noble must be trained. That concerning desires and aversions, so that he may neither fail to get what he desires nor fall into what he would avoid. That concerning the impulse to act and not to act, and, in general, appropriate behavior; so that he may act in an orderly manner and after due consideration, and not carelessly. The third is concerned with freedom from deception and hasty judgment, and, in general, whatever is connected with assent.
>
> (*Dis*. 3.2.1)

As Epictetus explains a little further down, the aim of the third area is to develop the ability to resist our natural tendency to assent to impressions that we have not tested

beforehand to determined whether they are veridical or misleading. This ability will allow us to suspend judgment as long as we have not tested an impression. It will thus ensure that we will not assent to a false impression or reject a true one.

> The third falls to those who are already making progress and is concerned with the achievement of certainty in the matters already covered, so that even in dreams, or drunkenness or melancholy no untested impression may catch us off guard
>
> (*Dis*. 3.2.5)

It is not immediately clear how logical theory is needed us to achieve this goal. But in fact there are two reasons why it is needed. Given that testing an impression requires proving or disproving its content, logical theory is needed, first, because although we may be able to produce a perfect proof *P* without it, we cannot establish that *P* is indeed a perfect proof (and not for example a fallacy that looks like a proof) unless we have recourse to it; and second, because, when we produce an imperfect proof, we need logical theory to determine what is missing and how to improve it. To take an example: I form the impression that something *S* is the case. It strikes me as true, but before I assent I need to test the impression to see whether it is really true. This test will require the proof that *S* is the case. But once I give the proof, I will need to confirm that the proof is fine and, if it is not, I will need to correct it. This double use of logical theory is illustrated in the following passage from the *Manual*:

> The first and most necessary area of philosophy is the one that deals with the application of principles, such as "We ought not to lie"; the second deals with demonstrations, for instance, "How is it that we ought not to lie?"; the third confirms and articulates the other two, for instance, "How comes it that this is a proof?" For what is a proof, what is logical consequence, what contradiction, what truth, and what falsehood?
>
> (*Ench*. 52)

In sum, knowledge of logical theory is needed to conduct appropriately a central discipline in Epictetus' ethics, the discipline of testing our impressions. In fact, this instrumental role is what makes it something valuable. Logical theory *owes* its value to this role and, therefore, it should not be pursued for its own sake or independently from this ethical objective. This is stressed by Epictetus in the lines immediately after the passage just quoted.

> The third area of study [that is, logical theory], then, is necessary on the account of the second, and the second on the account of the first. But the most necessary, and that on which we should dwell, is the first. But we do the reverse. For we spend all our time on the third topic, and employ all our effort on that, and entirely neglect the first. Therefore, we speak falsely, but are quite ready to show how it is proved that one ought not to speak falsely (*Ench*. 52).

Similar evidence may be drawn from Seneca, who has been identified as a "logical utilitarian" in a recent major study on Roman Stoic logic: someone who believes, like Epictetus, that logical theory should be studied insofar as it useful in other areas of knowledge, and should not to be pursued as if it were an intrinsically valuable subject of enquiry (Barnes 1997: 12–23).

The logical utilitarianism of Seneca and Epictetus marks a difference between Roman and early Stoicism. The early Stoics admitted that logical theory is indispensable in order to perform certain tasks in ethics and science, similar to those attributed to it by Epictetus (see Hülser 1988: 1.90 and Diogenes Laertius 7.45 with commentary by Crivelli 2007: 25–28). But, in contrast with what we observe in Seneca and Epictetus, this ancillary role is not its sole meaning and justification. In fact, there is strong evidence that the early Stoics undertook the study of topics in logical theory that were not meant to have any application or utility in other areas of knowledge, such as the validity of "reduplicated arguments" for example, *If it is day, it is day; it is day; therefore, it is day* (see von Arnim 1905: 2.269–271 and Barnes 1997: 20–23). This view, according to which logical theory may be pursued for its own sake, is clearly opposed to logical utilitarianism. But either way the study of logical theory is indispensable and should be pursued. And this fundamental agreement gives to this discipline a place of pride both in early and Roman Stoic thought.

Ethics

The works of Seneca, Epictetus and Marcus Aurelius are mainly concerned with ethical issues. In fact, ethics is, in some respect, the area in which Roman Stoicism is most innovative. One specific field in which innovation is particularly significant is the theory of the self and personality arising from Epicetus, Seneca and Hierocles, studied extensively in several recent works (among which: Reydams-Schils 2005, Gill 2006, Sorabji 2006, and Frede 2007). In what follows, I focus instead on two other topics: moral responsibility and the emotions. Here too Roman stoicism is often regarded as especially innovative. But in this case the evidence is not as convincing. The contribution of Roman Stoics to Stoic thinking about moral responsibility and the emotions is less substantive than it may initially seem.

From Aristotle onwards, the topic of moral responsibility in ancient philosophy is often connected to the question of what "depends on us" (in Greek: *eph' hēmin*). To determine whether we are morally responsible for an event, for example my failure at the exam, we need to find out whether its occurrence depended on us. If it did, and only if it did, we deserve blame (or praise) for it. On one influential interpretation (Bobzien 1998), this correlation obtains in Chrysippus, but not in Stoicism as a whole and, at any rate, not in Roman Stoicism. For in Epictetus the concept of what depends on us is not connected to the backward-looking question of when we deserve praise or blame for events that have happened, as in Chrysippus, but to the future-looking, prudential, issue of how to avoid frustration: Epictetus' work on the notion of what depends on us is aimed at fixing the conditions under which an activity we perform cannot by its nature depend on factors that are beyond our control. Evidence for this comes in Epictetus' repeated claim that the only activities that depend on us are those whose exercise cannot be thwarted under any possible circumstance and, thus, in his view that only some of our mental activities, for example assent, depend on us (*Dis*. 1.1.22–23 and 4.1.68–73, *Ench*.1, 2 and 5). But there two qualifications that need to be made regarding this interpretation. First, the absence of a link in Epictetus between what depends on us and what we are morally responsible for does not mean that moral responsibility is not a central topic in Epictetan ethics. For it certainly is. In fact, Epictetus' conception of it is very similar to Chrysippus' even if Chrysippus, but not Epictetus, connects moral responsibility with what depends on us. To take one example: in *Disc*. 1.11 Epictetus

examines whether a father who did not stand by his ill daughter is morally excusable. In this context, he develops at length a causal conception of moral responsibility, according to which one is morally responsible for whatever is caused by our acts of assents, or "beliefs": *dogmata*, as opposed to external factors (Salles 2012). This causal conception of moral responsibility, in which the dual capacity for acting in opposite ways is not relevant, and in which the contrast between internal and external factors is crucial goes back to Chrysippus' cylinder argument (Cic. *Fat*. 41–5). Secondly, it is not even certain that Chrysippus connects moral responsibility with what depends on us. The only evidence we have for this link comes in Latin sources dealing with Chrysippus' cylinder, where he is said to have claimed that assent is *in nostra potestate*. But new research has shown persuasively that the term *in nostra potestate* in this context can hardly be a translation of *eph' hēmin*. In consequence, there is no reason to infer from these sources that Chrysippus ever used this concept in connection with the problem of moral responsibility (Gourinat 2005). From these two perspectives, Epictetus' innovations in this field are not as significant as they may seem at first. Finally, it is not entirely clear either whether Epictetus, but not Chrysippus, restricted the domain of things that depend on us to *mental* activities. For there appears to be some evidence that Epictetus included in this domain certain actions that involve the use of our limbs, and there is also evidence that Chrysippus imposed substantive restrictions for including in it activities that are not purely mental (Brennan 2000 and Sharples 2005).

Roman Stoic treatments of emotions are also conservative in one important aspect, for much of it is intended as a defense of early Stoicism against Platonic criticism. The Platonic attack on early Stoic theories of emotion was launched by Posidonius, an unorthodox Stoic of the first century BC (c. 135–51). For Posidonius had departed from the early Stoics, and especially Chrysippus, on the question whether emotion is caused by reason itself—as Chrysippus contented—or by an irrational part of the soul, distinct from reason, as Plato had maintained in the *Republic*. The polemic between Posidonius and Chrysippus, as well as the defense of Stoic orthodoxy by Roman Stoics, has been the object of extensive research in recent times (Sihvola and Engberg-Pedersen 2000 and Sorabji 2000). Although in this polemic Roman Stoicism is largely conservative, there is one important innovation that deserves comment. It is a new concept in the theory of emotion and represents a major contribution to Stoic thinking on the subject: the concept of first movements. These movements are bodily reactions that may occur prior to an emotion, but that are not yet the emotion itself, since the emotion can only occur by an act of assent while these reaction are involuntary and independent from reason. Thus one may experience first movements without in the end experiencing the emotion itself. The concept of first movement is probably an innovation of Seneca (*On Anger* 2.2.2, 2.4.1, 2.4.2), but is also attested for Epictetus (fr. 9 Schenkl, *Dis*. 3.24.107–108). One example of this sort of movement is the pallor that even a Stoic sage may experience in a situation of extreme danger. This pallor, we are told, should not be confused with the emotion of fear. For, unlike this first movement, fear would arise only if the sage were to give assent to the impression that a reaction to this danger is appropriate. But this is something that sage will not do insofar as any threat to his own life or the life of others is, from the perspective of true Stoic ethics, a matter of indifference. The concept of first movement may have been designed by Seneca in the context of his defense of early Stoic emotion theory against Platonist attack, but the concept itself seems to be absent from early Stoicism and seems to be, therefore, an innovation of Roman Stoicism (Sorabji 2000: 66–75 and 372–384). In conclusion, with the

exception of the theory of first movements, the position of Roman Stoicism in the fields of emotion and moral responsibility is not innovative.

Final remarks

To study the nature and meaning of Roman Stoicism, I have compared early and Roman Stoicism on special topics from the areas of ontology, physics, logical theory and ethics. This comparison has shown that, in general, Roman Stoicism is not substantially different. There are significant innovations, but also a considerable amount of conservatism and a clear continuity between early and Roman Stoicism in matters of doctrine and methodology. The sharpest difference between them lies in the form under which their ideas have come down to us. Whereas our knowledge of early Stoic ideas is based mainly on excerpts and reports of *treatises*—that is, of pieces of work designed as systematic and technical expositions of theories—our knowledge of Roman Stoic ideas is largely based on works that were *not* designed as treatises. This difference, however, is incidental. It would be foolish to suppose that Zeno and Chrysippus did not entertain personal or private thoughts on philosophical subjects, in much the same way as Seneca or Marcus Aurelius did, and it is not unlikely that the early Stoics, being so close in doctrine and in spirit to the Socratic tradition, used to address their own pupils and trainees to question them in the way that Epictetus did; on the other hand, there is strong evidence that several Roman Stoics dealt systematically and technically with theoretical matters even when their treatises are not extant. Thus, to conclude, there are significant differences in specific fields between early and Roman Stoicism, but the only general point of contrast, being purely incidental, does not seem to reveal in itself any deep difference between the whole of early and of Roman Stoicism.

References and Further Reading

Algra, K. (2007) "Epictetus and Stoic theology" in T. Scaltsas and A.S. Mason (eds.) *The Philosophy of Epictetus*, Oxford: Oxford University Press: 32–55.

Algra, K. (2009) "Stoic philosophical theology and Graeco-Roman religion" in R. Salles (ed.) *God and Cosmos in Stoicism*, Oxford: Oxford University Press: 224–52.

Barnes, J. (1997) *Logic and the Imperial Stoa*, Leiden: Brill.

Bastianini, G. and A. A. Long (1992) *Hierocles* in *Corpus dei papiri filosofici greci e latini*, vo. I,1, Florence: Olschki.

Bobzien, S. (1998) *Determinism and Freedom in Stoic Philosophy*, Oxford: Oxford University Press.

Bowen, A. & R. Todd (2004) *Cleomedes' Lectures on Astronomy: A Translation of The Heavens*, Berkeley and Los Angeles: University of California Press.

Brennan, T. (2000) "Reservation in Stoic ethics", *Archiv für Geschichte der Philosophie* 82: 149–77.

Brunschwig, J. (1988) "La théorie stoïcienne du genre suprême et l'ontologie platonicienne" translated in English as "The Stoic theory of the supreme genus and Platonic ontology" in J. Brunschwig, *Papers in Hellenistic Philosophy*, Cambridge: Cambridge University Press, 1994: 92–157.

Brunschwig, J. (2002), "Stoic Metaphysics" in B. Inwood (ed.) *The Cambridge Companion to the Stoics*, Cambridge: Cambridge University Press: 206–32.

Caston, V. (1999) "Something and nothing: the Stoics on concepts and universals", *Oxford Studies in Ancient Philosophy* 17: 145–213.

Cooper, J. M. (2004) "Moral theory and moral improvement: Marcus Aurelius" in J. M. Cooper, *Nature, Knowledge and the Good. Essays on Ancient Philosophy*, Princeton: Princeton University Press: 335–68.

Crivelli, P. (2007) "Epictetus and Logic" in T. Scaltsas and A. S. Mason (eds.) *The Philosophy of Epictetus*, Oxford: Oxford University Press: 20–31.

Dobbin, R. (1998) *Epictetus. Discourses I*, Oxford: Oxford University Press.

Frede, M. (2007) "A notion of person in Epictetus" in T. Scaltsas and A. S. Mason (eds.) *The Philosophy of Epictetus*, Oxford: Oxford University Press: 153–68.
Gill, C. (2006) *The Structured Self in Hellenistic and Roman Thought*, Oxford: Oxford University Press.
Gourinat, J.-B. (2005) "La 'prohairesis' chez Epictète: décision, volonté, ou 'personne morale'?" *Philosophie Antique* 5: 93–134.
Hadot, P. (1992) *La Citadelle Intérieure. Introduction aux Pensées de Marc-Aurèle*, Paris: Fayard.
Hülser, K. (1988) *Die Fragmente zur Dialektik der Stoiker*, Stuttgart: Frommann-Holzboog.
Inwood, B. (2002) "God and human knowledge in Seneca's *Natural Questions*" in B. Inwood, *Reading Seneca: Stoic Philosophy at Rome*, Oxford: Oxford University Press: 157–200.
Inwood, B. (2009) "Why Physics?" in R. Salles (ed.) *God and Cosmos in Stoicism*, Oxford: Oxford University Press: 201–23.
Long, A. A. (1996) "Notes on Hierocles Stoicus apud Stobaeum" in M. Serena Funghi (ed.) *Odoi Dizesios. Le Vie della Ricerca: Studi in onore di Francesco Adorno*, Florence: Olschki: 299–309.
Long, A. A. (2002) *Epictetus. A Stoic and Socratic Guide to Life*, Oxford: Oxford University Press.
Mansfeld, J. (1992) "Substance, being and division in Middle Platonist and Later Aristotelian contexts" in J. Mansfeld, *Heresiography in Context. Hyppolytus' Elenchos as a Source for Greek Philosophy*, Leiden: Brill: 78–109.
Nasta, M. (2007) "Marc Aurèle sur l'accord naturel des éléments et leur modularité", *Revue de Philosophie Ancienne* 25: 87–111.
Reydams-Schils, G. (2005) *The Roman Stoics. Self, Responsibility, and Affection*, Chicago: The University of Chicago Press.
Rutherford, R. (1989) *The Meditations of Marcus Aurelius: a Study*, Oxford: Oxford University Press.
Salles, R. (2005a), *The Stoics on Determinism and Compatibilism*, Aldershot: Ashgate.
Salles, R. (2005b) "*Ekpurosis* and the goodness of god in Cleanthes", *Phronesis* 50: 56–78.
Salles, R. (2012) "Oikeiosis in Epictetus" in A. Vigo (ed.) *Oikeiosis and the natural bases of ethics. From classical Stoicism to Modern Philosophy*. Hildesheim: Georg Olms Verlag: 95–119.
Sedley, D. (2005) "Stoic Metaphysics at Rome" in R. Salles (ed.) *Metaphysics, Soul and Ethics: Themes from the Work of Richard Sorabji*, Oxford: Oxford University Press: 117–42.
Sharples, R. (2005) "Ducunt volentem fata, nolentem trahunt" in C. Natali and S. Maso (eds.) *La catena delle cause. Determinismo e antideterminismo nel pensiero antico e in quello contemporaneo*, *Lexis* Suppl. vol. 29: 197–214.
Sihvola, J. and T. Engberg-Pedersen (eds.) (2000) *The Emotions in Hellenistic Philosophy*, Dordrecht-Boston-London: Kluwer Academic Publishers.
Sorabji, R. (2000) *Emotion and Peace of Mind. From Stoic Agitation to Christian Temptation*, Oxford: Oxford University Press.
Sorabji, R. (2006) *Self. Ancient and Modern Insights about Individuality, Life and Death*. Chicago: Chicago University Press.
Sorabji, R. (2007) "Time, place and extra cosmic space: Peripatetics in the first century BC and a Stoic opponent" in R. W. Sharples and R. Sorabji (eds.) *Greek and Roman Philosophy, 100 BC.–200 AD*, *Bulletin of the Institute of Classical Studies Suppl.* 2 vols: vol 1, 101–32.
Vogt, K. (2009) "Sons of the earth: are the Stoics metaphysical brutes?" *Phronesis* 54: 136–54.
Von Arnim, H. (1905) *Stoicorum Veterum Fragmenta*, Leipzig: Teubner.

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39
MIDDLE PLATONISM

Mauro Bonazzi

Early Imperial Platonism (first century BC–2nd/3rd century AD) is often regarded as a confused period in the history of Platonism, its distinctive mark being the failed attempt to transform Plato's arguments into a coherent system. The term usually employed eloquently confirms the negative judgment, since "Middle Platonism" seems to imply that the only unifying factor is its standing in between the first systematizations of the Old Academy on the one side and the more consistent Neoplatonist system on the other. Needless to say, those we call "Middle Platonists" would have vehemently reacted against such a label, and forcefully claimed that they were simply Platonists, that is, readers and exegetes of Plato's philosophy. Indeed, it is against Plato's dialogues that their thought can be best appreciated. For Early Imperial Platonists were the first to promote a systematizing reading of the dialogues and the result of their efforts is that Plato came to dominate the scene, in the philosophical schools and outside—a remarkable consequence of their philosophical activity is the influence exerted on the Jewish and Christian traditions—from Antiquity onwards. This achievement at least ought to be ascribed to thinkers who have only rarely attracted the interest they deserve, from Antiochus of Ascalon to Eudorus of Alexandria (first century BC), to Plutarch of Chaeronea (first–second century AD), Atticus of Athens, Alcinous, Apuleius of Madaura, Numenius of Apamea (second century AD) and Longinus (second–third century AD).

This Platonist "turn to dogmatism" (Dillon 1977: 52) comes at a moment of substantial changes in the history of ancient philosophy (for a general overview, see Frede 1999). A first factor is the crisis of the Athenian institutions as the unchallenged center of the philosophical world and the progressive decentralization of philosophy (Sedley 2003). The most striking case is the closure of Plato's Academy and Aristotle's Lyceum during Sulla's siege in 88–86 BC, with the Academic scholar, Philo of Larissa, escaping to Rome. Important as it is, this is however only one example of a trend which had begun earlier and which was going to develop further. Thus, Philo was not the first to reach Rome, as Panaetius and Philodemus show, and other examples can be paralleled from other cities, both before and after them. While in the Hellenistic period aspiring philosophers habitually fled to Athens, now several philosophical schools competed for attracting pupils all over the Mediterranean sea, and cities such as Rome in the west or Alexandria in the east were no less important than Athens. The Imperial age is the age of the capillary diffusion of philosophy.

This fact is important not so much in itself as for what it involves. Two consequences at least deserve to be taken into account (Hadot 1987; Donini 1994). First, the crisis of identity which derives from the eclipse of Athens. For the Athenian centers possessed an unquestioned authority as guardians of the orthodoxy; under the Empire, decentrali-

zation caused the emergence of new local groups, which were not subjected to the central institution, and promoted new ideas and interpretations, thereby putting pressure on the very notion of a single school. A distinctive trait of the period is the proliferation of polemical pamphlets and debates both between members of a single philosophical tradition and aimed at those of other schools, aiming at restoring an identity which was lost or, perhaps, never existed. Strictly related, and the second remarkable consequence, is the renewed attention on the "ancients", based on the assumption that truth and the sense of one own philosophical allegiance needed to be directly recovered in the texts of the founding philosophers. At this period, a philosopher's practice predominantly consists in the exegesis of the *ipsissima verba* of the revered masters of the past; new editions of the ancients philosophers are prepared (or invented, where the originals lacked, as in the case of the Pythagoras and the Pythagoreans), and the commentary, paraphrasis or handbook become the most popular *genres literaires*. In short, philosophy became prerogative of professors.

These are characteristics common to almost all the schools of the period, but they are particularly true of the Platonist tradition. For Platonists did not only have to confront a particularly varied tradition, including dogmatists such as Speusippus and Xenocrates and skeptics such as Arcesilaus, Carneades and Philo; they also had to react against attempts by other schools and philosophers (from the Stoics Panetius and Posidonius to the (neo)Pythagoreans and later the Peripatetics) to appropriate Plato and his philosophical heritage. Indeed, as has been correctly pointed out, there are several Platos circulating in the early Imperial Age, hardly compatible with one another; the history of Platonism can be regarded as the history of the conflicts among the supporters of such different interpretations, of attempts at conciliation and reactions against these attempts (Donini 1993: 370–371). It is not by chance that we are informed about so many polemics on almost every question and against everyone, to the effect that it is almost impossible to find two Platonists sharing the same doctrines on the most important topics. Predictably, it is the legacy of the Hellenistic skeptically-oriented Academy which at the beginning raised the hottest controversies. If the dominant tendency, from Antiochus of Ascalon to Numenius of Apamea, was to reject it as a heresy or a betrayal which had nothing to share with the authentic and positive doctrines of Plato's philosophy, two important figures at least, Plutarch of Chaeronea and an anonymous commentator of the *Theaetetus*, argued in the opposite direction and tried to show that Academic anti-empiricist polemics against Stoics and Epicureans were compatible with Plato's philosophical dualism (cf. Opsomer 1998; Bonazzi 2012). Stoicism, even though it partly influenced the doctrines of some Platonists, was often attacked; but the notable exception of Antiochus, claiming that the Stoics were the legitimate Hellenistic heirs of Plato, must be also taken into account. (On the Platonist–Stoic controversy see Reydams-Schils 1999 and the articles collected by Bonazzi and Helmig 2007). The most controversial case, however, remains Aristotle. Indeed, the confrontation with Aristotle was so pervasive that Early Imperial Platonists are usually divided in anti-Aristotelian (Atticus) and pro-Aristotelian (Antiochus, Alcinoous, Plutarch partly) camps, perhaps an inadequate classification but one which well confirms Aristotle's importance in the development of Platonism (cf. Karamanolis 2006). Lastly, Plato's presumed dependence on Pythagoras was also matter of debate, and this connection promoted a "mathematicizing" version of Platonism (cf. Frede 1987; Tarrant 1993). In all these cases it is important to recognize that the discussion is not simply a matter of erudite historiography; on the contrary,

any single interpretative decision could involve specific and significant reshaping of the doctrine. Perhaps it would not be wrong to depict Early Imperial Platonism as a genuine battlefield.

Metaphysics and Cosmology

While the extent of the divergences and polemics may give the impression that there really was no such thing as a unified "Middle Platonism", the elements of continuity should not be neglected. First, even though their responses differ widely, all the Platonists share the same two basic assumptions: that Plato is the philosopher who first revealed the truth, and that the task of a Platonist (that is, of the only authentic philosopher) is to reconstruct the doctrinal system underlying the dialogues, the *Timaeus* in particular. Of these two claims, the second is the most intriguing and demands some comment. Plato's superiority was for Platonists as obvious as Aristotle's was for Aristotelians and Pyrrho's for Pyrrhonists; and yet from this the second claim that there is a perfect system in the dialogues does not necessarily follow (cf. for example, Albinus *Prol.* 4.149.13–14 Reis: "the doctrine [of Plato] is perfect and is similar to the perfect figure of the circle"). Nowadays few would endorse as uncontroversial the claim that Plato's dialogues, when properly read, reveal such a perfect system. This was the unquestioned commitment for all Platonists, however, and it is a fair assumption that in maintaining this view they were deeply influenced by the confrontation with other schools, Stoicism and the Aristotelian commentators most notably, who greatly insisted on the coherence and consistency of their system as a sign of the superiority of their philosophy (Donini 1994: 5027–35). This comparison further shows that Early Imperial Platonists also shared a common methodology, based not only on the popular practice of the commentary but also on the belief the one must go beyond the letter of the text in order to grasp the real content. As a matter of fact, the dialogues are notoriously ambiguous and simple exegesis did not suffice to reveal the coherence of the system (as was, for instance, the case for the Aristotelian commentators). What Platonists needed was a more "creative interpretation", according to the principle *ex eo quod scriptum sit ad id quod non sit scriptum pervenire* ("proceed from what is written to what is not written": Cic. *Inv.* 2.152 with Hadot 1987: 21; Donini 1994: 5081), and this is precisely what they did. Needless to say, the adoption of such an exegetical strategy is far from neutral in its prior commitments: as a matter of fact, the analysis of the most important doctrines will once again confirm the suspicion that Early Imperial Platonism was as much the result of the confrontation with the other schools as it was the result of that mere exegesis of the dialogues that it was claimed to be.

Along with these assumptions and this methodology, a third common element for Early Imperial Platonists is the objective of the exegesis, which always aims at a theological interpetation of Plato. Indeed, Proclus' *Platonic Theology* is not simply one of the best monuments of Neoplatonism but rather the final act of a longer history, which had begun much earlier, from the end of the first century BC. (Against this background, the interest in the ancient wisdom of legendary figures such as Orpheus, Zoroaster and Moses should also be explained). As far as the surviving evidence enables us to see, all Platonists shared the conviction that the dialogues argue for the superiority of a divine principle as the real cause of everything. Clearly, it was the *Timaeus* that most authoritatively endorsed such reading, and other passages can be paralleled from dialogues such as the *Republic* and the *Philebus*. From Eudorus to Numenius, from Plutarch to Longinus,

they are all committed to the existence of the first divine principle, which is interchangeably presented as the real being (*ontōs on*, the feature usually attributed to the ideas in the dialogues) and as a personal God, and provided with unity, intelligence and eternity (cf. Plut. *De E* 391E–394C; Phil. Alex. *Op.* 8). Admittedly, the union of philosophy and religion is not a distinctive feature of Platonism only; Stoicism for instance provides an interesting parallel. But the comparison with Stoicism helps us to grasp what is distinctively Platonist, that is the insistence on transcendence. Indeed, it may be further argued that the Platonist transcendent theology partly developed in reaction to Stoic immanentism: on this point the attacks are continuous from the beginning to the end of our period (cf. Plut. *Comm. not.* 1085B–E; Alcin. *Did.* 10.166.1–10; Calc. *in Tim.* 294–297).

A major problem emerges concerning this theological development, however: it is easy to notice that the doctrine of a transcendent God is nowhere stated explicitly in Plato's dialogues. One may at most concede that some clues might be exploited in its favor, but no more than that. Dialogues such as the *Timaeus* can be regarded not so much as the starting point for this interpretation as evidence confirming a doctrine which had been borrowed from elsewhere (Baltes 1975: 258). Furthermore, anti-Stoic polemic alone, for all its importance, does not suffice on its own to account for the development of this doctrine. In fact, some more specific influence can be detected. In particular, and paradoxical as it may appear, we might look instead to Aristotle. In the evidence for the very first phase of Imperial Platonism the insistence on the first transcendent principle often emerges as influenced by Aristotle's metaphysics (most notably Eudorus fr. 3–5 Mazzarelli; pseud.-Arch. *De princ.* 19.5–20.1 Thesleff; later cf. Alcinous *Did.* 164.20–27). In consequence, a most intriguing situation emerges, for Aristotle developed his views in opposition to Plato and the Old Academy; and the strategy exploited by the first Platonists seems to be to appropriate the Aristotelian arguments while at the same time refusing Aristotle's polemical charges by showing that in fact such doctrines were already in Plato's dialogues (this strategy is even subtler when one considers that the production of pseudo-Pythagorean such as pseudo-Archytas' *On Categories* or *On Principles* or pseudo-Timaeus' *On the generation of the Universe* serves to provide the "historical" evidence that presumably Aristotelian doctrines had in fact already been stated by Pythagoreans and then developed by Plato). Indeed, if one considers that the same strategy is equally exploited regarding of many other fundamental problems, such as the generation of the universe or the categories, it is difficult to resist the temptation to conclude that Early Imperial Platonism is nothing more than the Platonist response to Aristotelian (and in minor degree Stoic) problems and exigencies (Bonazzi 2013).

Significant are they are, such influences do not however exclude the parallel importance of Plato's dialogues. The dialogues are the permanent reference-point for establishing the validity of Platonist arguments; and it is because of their ambiguity and richness that Platonists, though sharing the same assumptions and aims, develop radically different systems. Predictably, the most debated issues concern the first principles, from the number of the Gods to the status of the ideas. Consider first the first divine principle. The most important reference can be extracted from the *Timaeus*' allusions to the Demiurgic God ordering the universe on the basis of the paradigmatic model. What, though, about the Idea of the Good in *Republic* 508e2–3? For Atticus and Longinus it is clearly the same God, for in the *Timaeus* the essential and most important property of the Demiurge is Goodness (29e1, 37a1), and for them this confirms the identification: the Demiurge is the Good *par excellence*, that is the Idea of Good (and note that in the

Republic too there is a reference to the "good God", 379b1). The conclusion is therefore that there is one single God (Atticus fr. 12 and 28.7–8 des Places; see Baltes 1983), a view also shared among others by Plutarch (Ferrari 1995: 185–269). We do not have to wait for Plotinus for criticisms of this view, however. For if the Idea of the Good is identified with the Demiurge, its separation and simplicity are in jeopardy: the correct account then points to the distinction between a divine, transcendent and unknowable principle, which is the cause of the universe but not involved in its creation, and a secondary God, who operates concretely on the basis of the first paradigmatic model (Num., fr. 11–20 des Places). When a further distinction is introduced between the second thinking God and the third operating God (probably to be identified with the World Soul of Plato's *Timaeus*), the result is a hierarchy of realities which anticipates the Plotinian system and which will be later adopted by the subsequent (neo)Platonists (Alcin. *Did.*164.16–27; Apul. *De Plat.*1.6.193; Num. fr. 21–22 des Places). Remarkably, it is not simply matter of making sense of apparently diverging passages in the dialogues; on the contrary, exegesis serves to discuss substantial problems related to Plato's philosophy. For the growing concern to preserve the absolute transcendence and simplicity of the first principle somehow constitutes the theological version of what we usually know as the problem of the self-predication of the Forms, which was first introduced by Aristotle's celebrated "third man" argument and then did not cease to exert the intelligence of any readers of the dialogues (cf. Bonazzi 2004: 81–84 with further bibliography).

Strictly dependent on this new emphasis on the divine principle is also the problem of accounting for the Ideas (Forms). In the Hellenistic and doxographical reports, a two-principles doctrine is usually presented as distinctive of Plato and Platonism (Theoph. *Phys. op.* fr. 9; Diog. Laert. 3.69), but this hardly fits the specificity of the Platonist system, which rather implies three principles – not only God and matter, but also a principle mediating between the two, that is the Ideas. The importance of the Ideas as mediating principles directly follows from the transcendence of the first divine principle. For in a religious perspective it is unimaginable, to quote Philo of Alexandria, a Jewish thinker deeply influenced by the Platonism of his time, to think that God, "happy and blessed as it was", could "touch the limitless chaotic matter" (*De specialibus legibus* 1.329). How, then, should one explain the creation of the universe? The insistence on transcendence brings out the typical problem of Platonism: the need to reconcile distinct planes of reality. Furthermore, if the growing importance of the theological perspective made this need to preserve God's separateness still more deeply felt, no less urgent was the need to make the existence of everything dependent on his providential intervention. In Plato's *Timaeus* the mediating function was performed by the demiurge; the theological reading of the *Timaeus* in the early Imperial age, by contrast, entails the demiurge being identified with the first divine principle, while the role of mediator is performed by eidetic principles: they are the instrument that the first principle uses to order matter. More systematically, Forms or Ideas are "in relation to God, his thinking; in relation to us, the primary object of thought; in relation to matter, measure; in relation to the sensible world, its paradigm, and in relation to itself, essence" (Alcin. *Did.* 163.14–17). In other words, Ideas are the perfect thoughts of the "things in accordance with nature" (Alcin. *Did.* 163.24) that God thinks when ordering matter; in this sense they provide the model for order in the world and the reference-point for human knowledge. To be sure, like the demiurgic God they equally belong to the intelligible and transcendent realm (a further distinction is between proper Ideas or first intelligibles and second intelligibles or Forms in matter sometimes corresponding to the mathematical entities,

Plut. *Quaest. Plat.* 3.1001c); but their mediating role is evident: it is through Ideas that the two ontological levels of reality can communicate. Not every difficulty is solved, though. For insofar as they are considered to be the "thoughts" of God, the risk is once again that their ontological autonomy collapses and the tripartite system is reduced to a bipartite system. In fact, this is a cardinal and permanent problem for Platonists, and it is not by chance that it is precisely on this point that Plotinus' break will occur, at the time of the controversy with Longinus, the leading Athenian Platonist (cf. Porphyry *VP* 18–21). Longinus' interpretation eloquently demonstrates the capacity of Platonists to appropriate the doctrines of other schools and to exploit them for their own purposes (Frede 1990, Männlein-Robert 2001: 536–547). Longinus' proposal is based on a parallel with the Stoic *lekta*, that is, with the distinction between the act of thinking and the propositional content of the thought. Exploiting the Stoic doctrine, Longinus argued both for the dependence of the Ideas on God and also their extra-mental and eternal subsistence (given God's eternity, cf. frs. 17–19 Brisson and Patillon; Longinus was probably refining an argument previously proposed by Atticus, cf. frs. 28.5–7 and 34.6 des Places with Baltes 1983: 41–42). Whether this ingenious parallel suffices to account for the proper existence of the Ideas is controversial, however, and Longinus' interpretation was rejected as an incorrect exegesis of Plato's *Timaeus* by Plotinus (and the subsequent Neoplatonists, cf. Syrianus *in Metaph.* 105.25–30). All in all, on this specific issue it does appear that Heinrich Dörrie was right when he spoke of the history of Platonism as of the history of the abandonment of the Ideas.

The strict interaction between the exegetical practice, the theological concern and the confrontation with other schools emerges also concerning cosmological issues. One of the most hotly debated passages of the dialogues was the elliptical sentence at *Timaeus* 28b, where it is claimed that the universe "was generated (*gegone*)" (cf. Baltes 1976). What was the proper meaning of this verb in the account of the creation of the universe (creation clearly being conceived not in the sense of a creation *ex nihilo*, but as the act of ordering chaotic matter)? The controversy was wide and exercised the scholastic minds of the Platonist professors, to the extent that Calvenus Taurus was capable to distinguish five different meanings of *genētos*, "generated" (Taurus frs. 22–27 Gioè). Basically, there were two available solutions. A first possibility was to defend a non-literal reading of the text by arguing that it was simply a metaphor used by Plato in order to make clear a very complicated problem; for in fact the universe was eternal – this was Plato's position and the correct account of the generation of the world (along with Taurus, cf. Eudorus. fr. 6 Mazzarelli; Alcinous. *Did.* 169.28; Apuleius *De Plat.* 1.8, 198; Severus, T 6–8 Gioè); the second possibility denied such a reading by forcefully claiming that the text had to be taken literally as endorsing a real, temporal creation of the universe (cf. Plut. *De an. procr.* 1013e–f; Atticus fr. 4 and 19 des Places). Now, what is interesting is not so much the question of who is right (and it is probably impossible to settle the issue definitively) as to consider the arguments and what is really at stake: in both cases the principle leading the interpretation is the requirement to stress the theological dimension of Plato's philosophy. This is particularly clear if one considers Atticus' defense of the literalist reading. The great mistake of the non-literalist interpretation is that an eternal and ungenerated world would not need any divine intervention (neither a demiurge who creates it nor a providence which keeps it in order), and this is incompatible with Plato. Needless to say, the defenders of the opposing interpretation were very reluctant to concede that their reading was promoting such an "atheist" account of Plato and of the universe. On the contrary, most of the arguments in favor

of the eternity view rest on the thesis of the *creatio continua*, that is on the theory of the eternal intervention of God, who is continuously and eternally active. The importance of such controversy becomes more urgent if one further notices that the debate over the proper meaning of *Ti.* 28b did not begin in early Imperial centuries, but dates back to Aristotle's *De caelo* (cf. 1.10, 279b17–21; 279b32–280a10; 280a29–32): the problem was also to defend Plato from Aristotle's criticisms. Indeed, against this background it becomes clear how accounting for the authentic meaning of Plato's text also served to argue in favor of his superiority over the other philosophers. Furthermore, if Atticus' (and Plutarch's) position can at least be appreciated for its internal coherence, it is rather the other interpretation which is more illustrative of the philosophical strategies of Early Imperial Platonists. A consequence of Atticus' literalist interpretation was the possibility of attacking his Platonist colleagues for trying to combine what was impossible to reconcile: Plato's providential philosophy and Aristotle's anti-providentialism. The incompatibility between Plato and Aristotle is Atticus' recurring obsession and the discussion of this problem enabled him to return on the point on various occasions (Trabattoni 1987). The arguments of his adversaries are more problematic and intriguing. In the footsteps of the Old Academy (cf. Xenocrates frs. 153–158 Isnardi Parente = 54 Heinze), they accepted Aristotle' eternity thesis as correct. To do so without recognizing Aristotle's superiority, however, they had to show that Plato had already endorsed that very same view (remarkably, as already suggested, the production of the Pseudopythagorica, which basically dates to this period, served exactly for this defense; in particular consider Pseudo-Timaeus: the attribution to the original Timaeus, the Pythagorean whom Plato was supposed to have followed, the non-literalist position, was the clear confirmation that this was also Plato's view—cf. Bonazzi 2013). Furthermore, by stressing Plato's priority they could also blame Aristotle for neglecting what mattered most, the divine Providence that he culpably dismissed by paying attention only to physical (and defective) arguments. In short, criticism legitimates appropriation: Aristotle's theory makes sense only within Plato's metaphysics—or so Platonists argue. The appropriation of Aristotle does not go without consequences, however, for it is difficult to avoid the conclusion that on many decisive points the development of Platonism was more dependent on an engagement with Aristotle than with Plato himself. Moreover, even leaving Aristotle aside, this controversy is helpfully illustrative of the way Middle Platonists did philosophy. It is clearly the case that exegesis is not an end in itself, but the instrument to discuss substantial problems. In spite of the Platonists' claim to be mere interpreters of Plato, there is a strong temptation to regard their interpretations as an attempt to attribute to Plato doctrines to which they were already committed.

Epistemology

As already noted, the renewal of interest in Plato's metaphysics does not imply a sudden neglect of Hellenistic debates; on the contrary, Middle Platonists were firmly convinced that the correct restoration of Plato's authentic teaching could finally enable them to settle the problems which Hellenistic philosophers had tackled inadequately. Again exegesis proves to be decisive for philosophy; and like in metaphysics and cosmology, so with regard to the human world, in the fields of epistemology and ethics. In the case of epistemology, Alcinous' *Didaskalikos* chapter 4 provides a good example of this ambition (Boys and Stones 2005; Sedley 1995: 495). The chapter is announced as dealing with the most important issue of Hellenistic epistemology, the problem of the criterion

(*Did.* 154.8–9), and shows the massive influence of the Hellenistic technical vocabulary. Yet the results are completely new. For only the Platonic distinction between the intelligible and the sensible, so Alcinous appears to argue, provides the key for a proper account of the much debated distinction between opinion (*doxa*) and knowledge (*epistēmē*). This integration of old doctrines and their adaptation into a different theory is particularly clear with regard to the *koinai* or *physikai ennoiai* ("common" or "natural conceptions"), one of the Stoic criteria of knowledge and a substantial part of the Stoic-Academic controversy (see Boys-Stones 2005: 212–223; Chiaradonna 2007: 209–215. Platonists employ this concept very widely, cf. Antiochus in Cic. *Acad.* 1.30–32; Cic. *Tusc.*1.57–58; Albin. *Prol.* 150.21–22 and 33–35; Anon. *in Plat. Theaet.* 46.42–48.7; 47.43; Plut. fr. 215f; Plut. *Quaest. Plat.*1000e). For the Stoics, these common or natural conceptions are a cluster of concepts common to all human beings, which are not innate but are naturally produced in them; they constitute the mental criterion that enable us to discriminate the correctness of sense-perception, thereby rejecting the Academic arguments against the possibility of proper knowledge (*katalēpsis*). According to Alcinous, this Stoic view is correct, but incomplete. For the Stoic doctrine is not capable of properly accounting for how these conceptions are produced in human minds. As a matter of fact, to affirm, as the Stoics do, that conceptions are produced during the process of human development does not explain anything; nor can it be claimed that they are the result of repeated sensations only, given the instability of sense-perceptions (this is the Academic argument; cf. further Alcin. *Did.*178.4–11). The correct solution, rather, is that they are innate in the sense that they correspond to a previous experience: the grasping of the Forms (*Did.* 155.24–34). Sense-perception awakens in human beings the knowledge of Ideas and this knowledge serves as a criterion for sense-perceptions. (Remarkably a similar argument is valid also with regard to Aristotle's epistemology, and it is not by chance that Aristotelian jargon too is heavily present in Alcinous' chapter; see Schrenk 1993). The conclusion is that sensible reality cannot be known in itself, but insofar as it participates in the intelligible realm. With this metaphysical reshaping of the Stoic theory, Alcinous and the other Middle Platonists can subordinate both Stoics and skeptical Academics to their Platonism. In the case of the Stoics, they do so by showing that the adoption of Plato's metaphysical apparatus is the only way to defend their theory; in turn this appropriation serves also to reject the Academic challenge by providing the Stoic criterion with an adequate foundation (cf. Anon. in *Plat. Theaet.* Tht. 47.36–48.11). Needless to say, that the Academic skeptics and Stoics would have accepted this argument is highly unlikely.

It is not only Academics and Stoics who might resist such solution. In fact it is easy to see that Early Imperial Platonists, far from having resolved the problem, have shifted it to another level: the real controversy now concerns the knowledge of Ideas. For the virtual identification between Ideas and Stoic "common conceptions" can be accepted as solving the epistemological problem only if it is demonstrated that we have an exhaustive grasping of the Ideas. Middle Platonists were not ready to commit to this view uncontroversially, however (nor were Neoplatonists: cf. Proclus *in Prm.* 948.12–38); they usually speak of contemplating the Ideas, but they also recognize that a real knowledge of them is "prior to the soul's coming to be in this body" (*Did.* 155.22–23), which can be taken as an admission that in our incarnate state we do not properly know them. If that is the case, though, if Platonists cannot provide an uncontroversial demonstration of the Ideas, there is once again the threat of skepticism, that is, of the impossibility of a perfect equivalence between the knowing subject and the known object. (The

insistence on the difficulty of properly knowing the divine principles is typical of Plutarch: cf. *De sera* 549E–F, *De Is. et Os.* 351C; see Donini 1986 and Babut 1994). Again, a comparison with Plotinus is instructive. For one of his most original claims is the view that a part of human soul is not descended but participates in the intelligible world and is therefore in constant and direct contact with the intelligible Ideas (*Enn.* 4.8.1.1–11; 5.1.12). Indeed, it may be observed that such a view serves to precisely to block the skeptic drift (Chiaradonna 2005). Unlike his colleagues, Plotinus regularly displays far more philosophical awareness of the problems at stake (consider his unfair criticism of Longinus, blamed for being a *philologos* and not a *philosophos*: Porph. *VP* 14.18–20). It may still be doubted that his solution is the more faithful to Plato, however; perhaps it is the tension between skepticism and dogmatism distinctive of Early Imperial Platonism that better mirrors the core of Plato's philosophy.

Ethics, psychology, and politics

The most innovative elements of Platonism concern ethics. A common belief of Hellenistic ethics is the commitment to naturalism; Early Imperial Platonists argued that the measure of virtue and happiness cannot be found in the human world alone, but depends on the divine principle. The novelty is the detachment of *theos* (God) from *physis* (nature). The gradual separation of God from the cosmos, between the creator and its product, also means a parallel shift from a cosmic theology to a "meta-cosmic" theology: it is not enough to adapt oneself to the laws of this world, but necessary to assimilate oneself to that God who is other than us, but to whom we are related like children to their father. The Stoic standard exhortation "to live in accordance to nature" (still endorsed by Antiochus) is now substituted by "assimilation to God" (*homoiōsis theōi*) (cf. Annas 1999: 52–71). Important evidence for the polemical background is the Anonymous Commentator on the *Theaetetus*, who argues that assimilation to God is the only adequate foundation for ethics and a definitive solution to the limits of the Hellenistic debate (Lévy 1993: 152–153; Bastianni and Sedley 1995: 495). The anonymous commentator establishes an explicit contrast between *oikeiōsis* (appropriation), the basic principle of Stoic ethics, and the *homoiōsis*. Against the Stoics, who claimed to found justice on human nature, the arguments of Academics (and Epicureans) are exploited in order to show that human nature is intrinsically egoistic, and that the only possible foundation is God, to whom the soul can be assimilated, transcending its nature (5.15–7.25). The Platonic background of this doctrine and its strategic importance is further shown by a text preserved in Stobaeus' *Anthology* (and tentatively attributed to Arius or Eudorus), which can be probably regarded as the most representative text for Early Imperial Platonism and deserves to be quoted in full:

> Socrates and Plato agree with Pythagoras that the human goal is assimilation to God. Plato articulated it more clearly by adding "in respect of what is possible", and it is only possible by wisdom, that is to say, by living in accordance with virtue. In God resides the capacity to create the cosmos and to administer it; in the wise person establishment and regulation of a way of life are present. Homer hints at this when he says: "proceed in the footsteps of God" (*Odyssey* 5.193), while Pythagoras after him says: "follow God". Clearly by God he means not the visible God who advances, but the intelligible God who is the harmonic cause of the good cosmic order. Plato states it according to the three

> parts of philosophy: physically (and in the Pythagorean manner I will add) in the *Timaeus*, pointing out without envy the previous observation of Pythagoras; ethically in the *Republic*, and logically in the *Theaetetus*. In the fourth book of the *Laws* he speaks clearly and at the same time richly on the subject of following God. Plato has many voices, not many doctrines. The things about the ends are said by him in many ways. And since he is learned and magniloquent, his style is varied, but this variety contributes to the same meaning, which is consonant with the doctrine. This consists in living in accordance with virtue, and that in turn means both the acquiring and the exercising of perfect virtue. That Plato considers the perfect virtue the goal is stated in the *Timaeus* as well, where he indicates also the name; I will quote the end of the passage, which runs: "by assimilating (*homoiōsanta*), bring to fulfilment (*telos*) the best of life offered by the gods to mankind for present and future time (*Tim.* 90c–d)".
>
> (Stobaeus 2.7.3 Wachsmuth)

Behind the new formula and the contrast with Hellenistic ethics what is important to note is that this interpretation involves a different conception not only of nature in general, but also, more precisely, of the nature of man and his soul. The soul, predictably regarded as the most important part of human being, is no longer considered as a homogenous block as the Stoics claimed, but is divided in at least two parts, one rational the other irrational, the latter being further subdivided in two different parts, following the tripartite psychology of the *Republic*, *Phaedrus* and *Timaeus*. (For more in general on Platonist psychology and its metaphysical background, cf. Deuse 1983, Opsomer 1994, Ferrari 2007/2008). While the irrational part serves the needs of the body and the world of becoming (the *physis*), the former, with which we think and reason, is the same in kind as the divine; it is the part that brings us close to God and allows us become like him. This is the final goal of human life and the real task of philosophy for Early Imperial Platonists: to help human beings know who they really are. For someone to know himself means discovering the divine inside him; and understanding our divine nature is the key for realizing what really matters and for living a virtuous and happy life.

What, precisely, does assimilation to God involve? As usual, a general agreement on the outlines of the doctrine does not prevent disagreement between Platonists. More precisely, the controversy depends on the metaphysical hierarchy, for the introduction of more Gods raises the problem of establishing to which God we ought to assimilate ourselves; if it is to the first God (or at least to the God–Intellect) it follows that the assimilation has to be regarded as an eminently theoretical activity; if it is to the active Demiurgic God practical activity must not be neglected neither. Perhaps, however, most Platonists tried to defend both options (unfortunately the testimonies are less clear than one may desire, cf. Alcin. *Did.* 181.16–35 and Apul. *De Plat.* 2.23, 253). They were probably right, for Plato's philosophy does consist in both a theoretical and practical dimension. For, in order to assimilate oneself to God, order and harmony must be produced in the soul; and only an ordered and harmonic soul can properly contemplate the divine and understand what it means to be like God. Moral purification and knowledge converge to promote a happy life. By the way, it is worth noticing that the new theory of the *homoiōsis* does in fact serve to address an ancient problem, that of the kinds of life and the opposition between the contemplative and active life. In order to grasp the interest of Middle Platonism, the Hellenistic background must not be neglected. (A similar point holds also concerning to the controversy about *metriopatheia* and *apatheia*,

moderation or absence of passions. The distinction between a rational and irrational part involves the "natural" nature of the passions and argues for their control and not abolition – for *metriopatheia*; but there is also a place for *apatheia* with regard to the perfect virtue of the sage; cf. Dillon 1983).

Homoiōsis and the underlying psychological doctrine also enable us to correct the common view which presents Imperial Platonism as a sort of truncated Platonism, a Platonism without politics. This is only partially true. It is true that under the empire political theory and direct engagement were often frustrating (and even worse, if one consider that Longinus was killed on the charge of being one of the leaders of Palmira's secession). This does not mean a complete lack of interest for politics, however, as the case of Plutarch shows. For it is distinctive of Plutarch to insist that assimilation involves a political dimension too, insofar as the struggle for order and harmony means that the philosopher must take care of the soul of his citizens too (*Dion* 10.1–3, *Phoc.* 2.9, *Ad princ. inerud.* 780E–F; cf. also *Stoic. rep.* 1033A–1034C, *Adv. Col.* 1126B–D, blaming Stoics and Epicureans precisely for their refusal to engage in politics). Indeed, for any reader of Plato's dialogues such as the *Gorgias* it will be impossible to deny that real politics consists precisely in the care of the soul.

Conclusion

The history of Early Imperial Platonism is the history of how Platonism came to occupy the center of philosophical debates (Frede 1999, 793–797). The obvious difficulty of extracting a coherent and dogmatic system out of Plato's dialogues, along with the scope of the confrontation with other schools and philosophies, has often given the impression of a period of confusion and eclecticism. These two charges, however, offer precisely the best explanation for the philosophical relevance and historical interest of this movement. In these centuries a substantial change is produced in the field of philosophy, and the most active promoters of such change are Platonists. Thanks to their efforts, Plato will appear as the most prominent thinker, whom any aspiring philosopher must confront. This is true not only within the schools, for the same point applies also for religious traditions such as Christianism, Hebraism, and later the Islamic thought; even the attempts to revive paganism will be inspired by Platonism.

To be sure, the task was not easy, and the impression of confusion is sometimes justified (but not that of eclecticism, cf. Donini 1988). This confusion, however, can also be appreciated as a sign of the great intellectual freedom of the period. One leading scholar, John Whittaker, once observed that the first imperial age

> was a period of doubt and uncertainty preceding a period of dogmatic assurance. It is above all this uncertainty and hesitancy which give to the second century its peculiar quality. For where exist doubt and uncertainty, there also exist freedom of speculation and the possibility of intellectual experimentation. The period of Plutarch and his contemporaries is not only one of the most important in the history of human thought; it is also one of the most exciting.
>
> (Whittaker 1981: 60–61)

It is probable that Middle Platonists would not have accepted the claim of doubt and uncertainty; but Whittaker's is probably the best defense for their philosophy and for the historical importance of this period.

References and further reading

Sources

The most important source for Early Imperial Platonism is:

Dörrie, H. and Baltes, M. (1987–2008) *Der Platonismus in der Antike*, 7 vols., Stuttgart, Bad Cannstatt: Frommann-Holzboog.

Albinus

Reis, B. (1999) *Der Platoniker Albinos und sein sogennanter Prologos. Prolegomena, Überlieferungsgeschichte, kritische Edition und Übersetzung*, Wiesbaden: Reichert.

Alcinous

Dillon, J. (1993) *Alcinous. The Handbook of Platonism*, Oxford: Clarendon Press.
Whittaker, J. and Louis, P. (1990), *Alcinoos. Enseignement des doctrines de Platon*, Paris: Les Belles Lettres.

Anonymous Commentator on the *Theaetetus*:

Bastianiani, G. and Sedley, D. (1995) "Commentarium in Platonis Theaetetum," in *Corpus dei papiri filosofici greci e latini*, vol. III: *Commentari*, Florence: Olschki: 227–562.

Atticus

des Places, E. (1977) *Atticus. Fragments*, Paris: Les Belles Lettres.

Eudorus

Mazzarelli, C. (1985) "Raccolta e interpretazione delle testimonianze e dei frammenti del medioplatonico Eudoro di Alessandria," *Rivista di filosofia neoscolastica* 77: 197–209.

Longinus

Brisson, L. and Patillon, M. (2001) *Longin. Fragments Art rhétorique*, Paris: Les Belles Lettres.

Numenius

des Places, E. (1973) *Numénius. Fragments*, Paris: Les Belles Lettres.

Plutarch

Plutarch (1962–1976) *Moralia.* Various Editors, Loeb Classical Library: Harvard University Press.

Pseudo-Archytas

Szlezák, T. A. (1972) *Pseudo-Archytas. Über die Kategorien*, Berlin: de Gruyter.
Thesleff, H. (ed.) (1965) *The Pythagorean Texts of the Hellenistic Period*, Åbo: Åbo Akademi.

Pseudo-Timaeus

Baltes, M. (1972) *Timaios Lokros. Über die Natur des Kosmos und der Seele*, Leiden: Brill.

References

Annas, J. (1999) *Platonic Ethics. Old and New*, Ithaca and London: Cornell University Press.

Babut, D. (1994) "Du scepticisme au dépassement de la raison. Philosophie et foi religieuse chez Plutarque," in D. Babut, *Parerga. Choix d'articles de Daniel Babut (1974–1994)*, Lyon: Maison de l'Orient Méditerranéen.

Baltes, M. (1975) "Numenius von Apamea und der platonische *Timaios*," *Vigiliae Christianae* 29: 241–78.

Baltes, M. (1976) *Die Weltenstehung des Platonischen Timaios nach den antiken Interpreten*, Leiden: Brill, vol. I.

Baltes, M. (1983) "Zur Philosophie des Platonikers Attikos," in H.-D. Blume and F. Mann (eds.) *Platonismus und Christentum. Festschrift für Heinrich Dörrie*, Münster: Aschendorffsche Verlag: 81–111.

Bonazzi, M. (2003) *Academici e Platonici.Il dibattito antico sullo scetticismo di Platone*, Milan: Led.

Bonazzi, M. (2004) "Un lettore antico della *Repubblica*: Numenio di Apamea," *Méthexis* 17: 71–84.

Bonazzi, M. (2007) "Eudorus of Alexandria and Early Imperial Platonism," in R. W. Sharples and R. Sorabji (eds.) *Greek and Roman Philosophy 100 BC–200 AD*, London: Bulletin of the Institute of Classical Volume Supplement 94, vol. II: 365–77.

Bonazzi, M. (2012) "Plutarch on the Difference between the Pyrrhonists and the Academics", *Oxford Studies in Ancient Philosophy* 43: 271–98.

Bonazzi, M. (2013) "Pythagoreanizing Aristotle: Eudorus and the Systematization of Platonism," in M. Schofield (ed.) *Aristotle, Plato, and Pythagoras, in the First Century BC*, Cambridge: Cambridge University Press: 160–86.

Bonazzi, M. and Helmig, C. (eds.) (2007) *Platonic Stoicism—Stoic Platonism. The Dialogue between Platonism and Stoicism in the Antiquity*, Leuven: Leuven University Press.

Boys-Stones, G. (2005) "Alcinous, *Didaskalikos*' 4: in Defence of Dogmatism," in M. Bonazzi and V. Celluprica (eds.) *L'eredità platonica. Studi sul platonismo da Arcesilao a Proclo*, Naples: Bibliopolis: 201–34.

Chiaradonna, R. (2005) "La dottrina dell'anima non discesa in Plotino e la conoscenza degli intelligibili," in E. Canone (ed.) *Per una storia del concetto di mente*, Florence: Olschki: 27–49.

Chiaradonna, R. (2007) "Platonismo e teoria della conoscenza stoica tra II e II secolo D.C.," in M. Bonazzi and C. Helmig (eds.) *Platonic Stoicism—Stoic Platonism. The Dialogue between Platonism and Stoicism in the Antiquity*, Leuven: Leuven University Press: 209–41.

Deuse, W. (1983) *Untersuchungen zur mittelplatonischen und neoplatonischen Seelenlehre*, Wiesbaden: Steiner.

Dillon, J. (1977) *The Middle Platonists*, London: Duckworth.

Dillon, J. (1983) "Metriopatheia and apatheia: some reflections on a controversy in later Greek Ethics," in J. Anton and A. Preus (eds.) *Essays in Ancient Philosophy*, vol. II, Albany: SUNY Press: 508–17.

Donini, P. L. (1986) "Lo scetticismo academico, Aristotele e l'unità della tradizione platonica secondo Plutarco," in G. Cambiano (ed.) *Storiografia e dossografia nella filosofia antica*, Torino: Tirrenia stampatori, 203–26.

Donini, P. L. (1988) "The History of the Concept of Eclecticism," in J. Dillon and A. A. Long (eds.) *The Question of 'Eclecticism'. Studies in Later Greek Philosophy*, Berkeley: University of California Press: 15–33.

Donini, P. L. (1993) "Il ritorno agli antichi," in C. A. Viano (ed.) *Storia della filosofia. 1: l'Antichità*, Roma, Bari: Laterza: 362–92.

Donini, P. L. (1994) "Testi e commenti, manuali e insegnamento: la forma sistematica e i metodi della filosofia in età postellenistica," in W. Haase and H. Temporini (eds.) *Aufstieg und Niedergang der Römischen Welt*, Berlin: de Gruyter, vol. II 36.7: 5027–100.

Ferrari, F. (1995) *Dio, idee e materia. La struttura del cosmo in Plutarco di Cheronea*, Naples: D'Auria.

Ferrari, F. (2007/2008) "I fondamenti metafisici dell'etica di Plutarco," *Ploutarchos* 5: 19–32.

Frede, M. (1987) "Numenius," in W. Haase and H. Temporini (eds.) *Aufstieg und Niedergang der Römischen Welt*, Berlin: de Gruyter, vol. II 36.2: 1034–75.

Frede, M. (1990) "La teoría de las ideas de Longino," *Méthexis* 3, 85–98.

Frede, M. (1999) "Epilogue," in K. Algra, J. Barnes, J. Mansfeld and M. Schofield (eds.) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press: 771–97.

Gioè, Adriano (2002) *Filosofi Medioplatonici del II secolo D.C. Testimonianze e Frammenti. Gaio, Albino, Nicostrato, Tauro, Severo, Arpocrazione*, Naples: Bibliopolis.

Hadot, P. (1987) "Théologie, exégèse, révélation, Écriture dans la philosophie grecque," in M. Tardieu (ed.) *Les règles de l'interprétation*, Paris: Éditions du Cerf: 13–34.

Karamanolis, G. (2006) *Plato and Aristotle in Agreement? Platonists on Aristotle from Antiochus to Porphyry*, Oxford: Clarendon Press.

Lévy, C (1993) "La Nouvelle Académie a-t-elle été antiplatonicienne?" in M. Dixsaut (ed.) *Contre Platon 1: le platonisme dévoilé*, Paris: Vrin: 139–56.
Männlein-Robert, L. (2001) *Longin. Philologe und Philosoph. Eine Interpretation der erhaltenen Zeugnisse*, München, Leipzig: Saur.
Opsomer, J. (1994) "L'âme du monde et l'âme de l'homme chez Plutarque," in M. Garcia Valdés (ed.) *Estudios sobre Plutarco: Ideas religiosas*, Madrid: Ediciones clasicas: 33–49.
Opsomer, J. (1998) *In Search of the Truth. Academic Tendencies in Middle Platonism*, Brussel: Kawlsk.
Reydams-Schils, G. (1999) *Demiurge and Providence. Stoic and Platonist Readings of Plato's Timaeus*, Turnhout: Brepols.
Schrenk, L. P. (1993) "The Middle Platonic Reception of Aristotelian Science," *Rheinische Museum* 136: 342–59.
Sedley, D. N. (1996) "Alcinous' epistemology," in K. A. Algra, P. W. van der Horst and D. T. Runia (eds.) *Polyhistor. Studies in the History and Historiography of Ancient Philosophy Presented to Jaap Mansfeld*, Leiden: Brill: 300–12.
Sedley, D. N. (2003) "Philodemus and the Decentralisation of Philosophy," *Cronache ercolanesi* 33: 31–41.
Tarrant, H. (1993) *Thrasyllan Platonism*, Ithaca and London: Cornell University Press.
Trabattoni, F. (1987) "Il frammento 4 di Attico," *Rivista di storia della filosofia* 42: 421–38.
Whittaker, J. (1981) "Plutarch, Platonism and Christianity," in H. J. Blumenthal and R. A. Markus (eds.) *Neoplatonism and Early Christian Thought*, London: Variorum Publications: 50–63.

Related chapters

Section II on Plato (Chapters 9–17)

34. The Hellenistic Academy
37. Philosophy comes to Rome
40. Galen
42. Plotinus
46. Ancient philosophy in Christian sources

40
GALEN

James Allen

Galen was best known in his own day (born AD 129–died early 3rd century)—as he has been ever since—as a physician and medical writer. The level of influence he exerted on the medical discipline, which lasted until the Renaissance and beyond and extended across the Greek East, the Latin West and the Arabic speaking world, has never been equaled (Temkin 1973). Indeed it may be doubted whether the eminence that Galen achieved in medicine has ever been matched by any single figure in any discipline of comparable importance. To say that he was also a philosopher is true, but misleading if this is taken to mean that philosophy was an avocation of his, cultivated independently of his medical studies. He was firmly committed to the view that philosophy was indispensable to medicine, practised at the highest level, and that the two disciplines were intimately and inseparably related. To mention just two out of many pieces of evidence: he dedicated a book to the proposition that the best physician must also be a philosopher *Quod optimus medicus sit quoque philosophus* (SM II 1–8=I 53–63 K; English translation in Singer 1997, new text and French translation in Boudon-Millot 2007; abbreviated references are explained in the 'Guide to reading Galen' at the end of this article), and he wrote an immense book, *De placitis Platonis et Hippocratis*, intended to demonstrate that his two heroes—Plato in philosophy and Hippocrates in medicine—were in fundamental agreement on key points. (Text with English translation: De Lacy 1978–84.) Though he may have staked out a particularly extreme version of this position, however, Galen's views about the close relation between philosophy and medicine were less surprising in the ancient context than they are likely to strike us today.

From the late fourth century BC onward the division of philosophy into three parts, logic, physics and ethics was widely accepted. Galen was no exception (*Opt. med.* SM II 7, 6–8=I 60, 16–61, 1 K). Logic and physics (or natural philosophy) especially embraced far more than what goes under the same heads today. The last was not only occupied with the ultimate or most fundamental constituents of the material world, as we might expect, but also with studies corresponding to geology, astronomy, theology and the life sciences. The idea that its concerns overlapped with those of medicine already had a long and contentious history by Galen's time. Plato had much to say about matters relevant to medicine in his immensely influential dialogue on natural philosophy, the *Timaeus*, which was a work of great importance to Galen as we can see from the fact that he not only wrote a commentary on the parts relevant to medicine (Schröder and Kahle 1934), but also an epitome of the *Timaeus* as a whole, which survives in Arabic translation (Kraus and Walzer 1951). Aristotle maintained that the study of health and disease is one of the natural philosopher's concerns and that while natural philosophy

concludes with a discussion of medicine, philosophically-minded physicians begin with the consideration of nature in general (*Sens.* 436a17 ff.; cf. *De resp.* 420b28).

On Ancient Medicine, the most widely read of the Hippocratic treatises in modern times, probably written in the late fifth century BC, is a fierce polemic against medical thinkers who would base medicine on what the author calls 'hypotheses', that is, fundamental elements or principles of the physical world postulated in the theories of the natural philosophers (Text, translation and discussion in Schiefsky 2005). He pays special attention to one version of hypothesis-theory, which identifies the hot, the cold, the wet, and the dry as fundamental principles, but views it as representative of a broader tendency. In opposition to this approach, he championed the view that medicine is an autonomous discipline independent of philosophy. Though in a sense a rejection of philosophy, the argument of *On Ancient Medicine*, concerned as it is with questions about the proper scope of medical knowledge, its relation to and degree of independence from more fundamental studies, is highly philosophical.

This point emerges still more clearly if we view issues from another, related angle, where the question is less the proper scope and content of medical knowledge than its nature and the means by which it is to be acquired and secured. The matters that the physician does not need to know according to the author of *On Ancient Medicine* are also among the hardest to know. Apart from being of questionable relevance to the art of medicine, answers to the questions pursued by the natural philosophers were plainly speculative in the extreme. It might be doubted whether knowledge regarding them can be had at all, in which case it would be just well if it were not essential medicine. According to the author of *On Ancient Medicine*, his discipline has its own principle (*archē*) and method of inquiry (*hodos*). Thus the medical discipline was from very early on occupied with questions about epistemology and method that are themselves philosophical, even or perhaps especially when the doctors were most concerned to reject the views of professional philosophers: what knowledge or expertise is; what standards a practitioner must satisfy to qualify as a knowledgeable expert; how knowledge satisfying the required standards is to be acquired and the like. Nor was it lost on the medical writers that the views they developed with special reference to the medical sphere had implications for the other arts and sciences as well.

On Ancient Medicine was merely an early contribution to a long-sustained debate within medicine. Notable later contributions to this debate were made by the physician and medical writer Diocles of Carystus, once thought to be a follower of Aristotle, but possibly perhaps better seen as reacting against the kind of demands Aristotle places on medical knowledge (Frede 2011, fragments collected by Van der Eijk 2000–2001), Herophilus, the great Alexandrian physician and anatomist active in the late second and early third century BC (von Staden 1989), and Galen himself. Galen was, for instance, much occupied with the dispute between medical Rationalism, which goes back to the emergence of the Empirical school of medicine in the mid third century BC, though the issue in contention was older than that. Our terms "rationalist" and "empiricist" stem from this debate, and medical Rationalists and Empiricists disagreed, just as their names would lead us to expect, less about how to treat patients—indeed Galen tells us they usually agreed about this—than about the nature and scope of medical knowledge and by implication artistic knowledge quite generally.

Unlike Empiricism, Rationalism was not a school in the institutional sense, and Rationalists were united by a common a tendency or outlook rather than agreement about substantive points of physiology and pathology, about which they often vehemently

disagreed. To be a Rationalist was to hold that in order to qualify as a genuine art, and to be able to discharge its function by restoring health to the sick and preserving it in those who are well, medicine had to be grounded in a grasp of the underlying nature of the body and the diseases from which it suffers; only in this way will it be able to understand the causes of health and illness and prescribe remedies in the light of this understanding. If, for instance, as many ancient doctors and philosophers supposed, illness is produced by an imbalance of the bodily humors whose proper balance constitutes health, the qualified medical artist will proceed by diagnosing the imbalance affecting the patient's body, which unlike the symptoms to which it gives rise is not evident to observation, and prescribe the therapy best calculated to counteract the disease and return the patient to health by restoring the correct balance. In rationalist terminology, the hidden, pathological condition of the body *indicates* its proper treatment. The relation between the illness and treatment discovered in this way is not one of mere correlation, of the kind that can be established simply by observation; the Rationalist has achieved an insight into *why* the disease is to be cured in this way at the same time he grasps *that* it is to be, an insight which rests on an understanding of the nature of the body in sickness and in health. Students of Plato will not be wrong if they detect an echo of Socrates' contention in the *Gorgias* that mere experience can never qualify as an art (465a, 501a; cf. *Phaedrus* 270b, *Laws* 720b, 857c). Though he had much to say about the value of experience as a necessary precondition for the emergence of art, Aristotle was of the same opinion (*Metaph.* A.1, 981a1ff.; *Eth. Nic.*10. 9, 1181a9ff.).

The medical Empiricists maintained in opposition to this philosophical consensus, which was shared by their Rationalist rivals, that medicine, and by implication the other arts, were possible on the basis of experience alone, by which they meant a grasp of the recurring patterns of conjunction and sequence obtaining among the phenomena based on observation and entirely divorced from an understanding the underlying nature and causes that might explain what is observed. Sometimes the Empiricists also argued that the art of medicine was possible in no other way because, apart from being of no use to the practice of medicine, the knowledge to which the Rationalists laid claim was in fact unobtainable. The arguments they put forward in support of this contention, often based on the unresolved disagreements among the rationalists themselves, resemble skeptical arguments, but the relation between medical Empiricism and philosophical skepticism was more than one of simple intellectual affinity. In one of the most striking examples of the close ties between medicine and philosophy in antiquity, Sextus Empiricus, the best known to us of the Pyrrhonian skeptics and possibly a rough contemporary of Galen's, was an Empiricial physician, as his name suggests. So too were a number of his predecessors, as well as his successor as head of the Pyrrhonian school (Allen 2010). When in the course of the first century BC and the succeeding century a third school of medicine arose—the so-called Methodists for whom Galen reserved some of his choicest invective—the distinctive feature that set it apart from both Empiricism and Rationalism was not novel forms of therapy, but a new conception of medical, and by implication scientific or artistic, knowledge in general (Frede 1982, fragments in Tecusan 2004). Like most participants in the debate between Rationalists and Empiricists, Galen believed that their respective positions more or less exhausted the possibilities. The Methodists, however, claimed to be guided in their choice of therapies by indication—the illness to be treated indicated its cure in a way that was not a matter of the Empiricists' observed correlations—yet unlike the Rationalists they held that the pathological conditions that were the source of the indication did not need to inferred from evident symptoms

because they were themselves apparent. The method from which they took their name was a matter of grasping what they called manifest generalities.

Though many of Galen's philosophical interests can be explained by the medical background, however, this is far from the whole story. His interests in philosophy were not confined to matters relevant to medicine even on his very generous conception of what those matter were, and there is evidence that he was treated seriously as a philosopher in his own lifetime. Alexander of Aphrodisias, the great Aristotelian commentator and a younger contemporary of Galen, argued against Galen's views on possibility and his criticisms of the Aristotelian doctrine that everything that is moved is moved by a mover (Pines 1961, Rescher and Marmura 1965). A group of Roman Christians who were eager to show that Christian doctrine could be presented in a form satisfying the rigorous standards of rational argument demanded by the philosophers is mentioned by the church father, Eusebius, who reports that they admired Aristotle and Theophrastus, but practically worshipped Galen, who was apparently the contemporary who best exemplified the philosophical ideals to which they aspired (*Hist. eccl.* 5.28, 13–14) (Walzer 1949, Barnes 2002).

We are unusually well-informed about Galen's intellectual development because of his own strong interest in the subject. It is noteworthy that his study of philosophy predated his interests in medicine and was never supplanted or absorbed by it. He was prepared for his life as a philosopher and physician by the exceptionally thorough education his father, the architect Nicon, arranged for him, though if Galen had not responded to his father's plans for him with enthusiasm, and brought formidable gifts, not least a genuinely awe-inspiring capacity for sustained hard work, to bear, the result would not have been the same. Galen spent his early years in the city of his birth, Pergamon, located on the Aegean coast of present-day Turkey, which was then a predominantly Greek speaking part of the Roman empire. There he studied with representatives of the four leading philosophical schools of the time. His teachers were a student of the Stoic, Philopator, a student of the middle Platonist, Gaius, a Peripatetic student of Aspasius, the Aristotelian commentator, and an Epicurean philosopher from Athens (*Aff. dig.* CMG V 4.1.1, 28,9–19=V 41, 10–42, 4 K). His father instructed him in arithmetic, calculation and grammar and arranged for him to study dialectic, the ancient counterpart of modern-day formal logic (*Ord. lib. prop.* SM II 88, 10–15=XIX 59, 4–9 K; *Libr. propr.* SM II 116, 22–6=XIX 40, 5–8 K).

Inspired by a dream, Nicon encouraged his son, now aged sixteen, to take up the study of medicine as well (*Ord. lib. prop.* SM II 88, 15–17=XIX 59, 9–11 K; MM X. 609, 8–11 K). After Nicon's death, when Galen was twenty, he pursued further medical and philosophical studies in Smyrna, where one of his teachers was the middle Platonist Albinus (*Libr. propr.* SM II 97, 10–11=XIX 16, 10 K). Back in Pergamon at age 28, he was appointed physician to the local gladiatorial school. It was in Rome, however, where he lived from 162 to AD 166 and again from AD 169, that he achieved his greatest success. He moved in exalted social circles. He treated the emperors, Marcus Aurelius, Commodus and Septimius Severus. Galen even reports that Marcus Aurelius described him as first among physicians and a unique philosopher (*Praen.* CMG V 8.1 128, 25–28=XIV 660, 9–12 K). He was famous, but also, again according to his own testimony, much envied by his professional rivals, whom he outshone in every way. The date of his death is uncertain, but was probably early in the third century AD (on Galen's life, see Nutton 2004: Chapter 15).

Dialectic, which corresponds to formal logic, was only one part of the ancient discipline of logic, which also tackled, among other things, issues about the nature and scope

of knowledge now the concern of epistemology. It occupied a large share of Galen's energies and may be the area in which he made his most notable philosophical contributions (Morison 2008). The relation between dialectic and the broader epistemological concerns of the logical part of philosophy is simple. It is chiefly concerned with the conditions that an argument must satisfy to qualify as valid, that is, to be such that its conclusion must be true if its premises are. Proofs are valid arguments satisfying additional requirements. Having a proof whose premises we know secures for us knowledge of the conclusion. Galen held that proof is the principal instrument by which truth or falsity is determined and knowledge won (*Ord. lib. prop.* SM II 82, 20–83, 6=XIX 52, 15–53, 10 K) (Barnes 1991, 1997, 2003, Hankinson 1991, Lloyd 1996). It was the possibility of securing truth beyond contention with the aid of proof in arithmetic and calculation, and above all geometry that, by his account, showed him the way out of the "skeptical crisis" that played a decisive part in his intellectual formation.

He was struck from early in his life by the sheer volume of disagreement in both medicine and philosophy, not least among his teachers. The term "disagreement" (*diaphōnia*) is prominent in Pyrrhonian skepticism, where unresolved disagreement is the basis for suspension of judgment, and without the certainty furnished by proof, he maintains, he might have been reduced to a condition of Pyrrhonian irresolution (*aporia*) himself (*Libr. propr.* SM II 116, 21–117, 16=XIX 40, 4–18). Skepticism was, then, though to some extent understandable, the wrong reaction to what Galen acknowledges was a very sorry state of affairs. The method of instruction advocated by Favorinus, who was influenced by the skeptical Academy and active in the first half of the second century AD, which would have the teacher renounce all authority and rely solely on arguments on both sides of the question went too far in Galen's view, and he wrote a work against it, the *De optima doctrina* (text with Italian translation Barigazzi 1991, discussion in Ioppolo 1993). In his view two pervasive failings were to blame for the situation to which skepticism was an overreaction. Loyalty to school or sect among philosophers and physicians was all too often stronger than the desire for truth. Those who style themselves Praxagoreans or Hippocratics and the like after a revered founder are, he maintains, in reality slaves (*Lib. prop.* SM II 95, 6–8=XIX 13, 16–18 K; cf. *MM* X. 274, 1–13 K; *Pecc. dig.* CMG V 4.1.1, 62, 17–18=V 93, 3–4 K). This intellectual defect is only exacerbated by widespread ignorance of demonstration (*Ord. lib. prop.*SM II 82, 3–14=XIX 52, 1–11 K; *MM* X 122, 10–16 K). Most of the disagreements which are everywhere in evidence were able to arise and persist, he charges, only because the parties to them have not mastered demonstrative reasoning. Such mastery would, he maintains, make it impossible either to maintain false views about issues that can be resolved by demonstration or pretend to certain knowledge about matters that cannot.

Galen composed a massive work in fifteen books on demonstration, now lost (*Libr. propr.* SM II 117, 18–20=XIX 41, 7–9 K) (fragments collected and discussed by Müller 1897, further discussion in Chiaradonna 2009). He urges those who would discover the truth in any subject matter to study it carefully (*Ord. lib. prop.*SM II 82, 21–83, 6=XIX 52, 17–53, 10 K). Galen's introduction to dialectic, the *Institutio logica* (text: Kalbfleisch 1896, German trans: Mau 1960, English trans: Kieffer 1964) is the sole surviving example of this once popular ancient genre of handbook (cf. Aulus Gellius *Noctes atticae* 16.8.1). The study of syllogisms, roughly speaking formally valid deductions, which is its object, is worth pursuing in his view only to the extent that it contributes to the understanding of proofs and the ability to prove. Because he thinks that each theory has its own use, he discusses both the categorical syllogistic theory of Aristotle, and

Stoic syllogistic theory, (VII. 3; cf. XIV. 1), but harshly criticizes one syllogistic form recognized Chrysippus, the Stoic philosopher and logician, as useless for the purposes of demonstration (XIV.3; XIV.10). Not everything that can be known is demonstrable and demonstrations must themselves set out from truths that can be known without demonstration. These must be self-evident (*MM* X 33, 16–34, 2 K). Human beings are, Galen maintains, equipped with two natural criteria, perception and intellect, each of which permits us to grasp the corresponding kind of evident truths, both of which he calls axioms (*Opt. doctr.* CMG V 1.1, 104, 5–12=I 49, 14–50, 8 K; *PHP* CMG V 4.1.2, 542, 8–20=V 723, 2–16 K; *Hipp. off. med.* XVIII B 659, 1–660, 2 K).

Galen calls the syllogisms recognized by the Stoics hypothetical syllogisms and argues that the so-called ancients—by whom he seem to have meant earlier Peripatetics—had already recognized counterparts of most of them under that name (Bobzien 2002). A noteworthy innovation of his logic was the recognition of a third kind of syllogism apart from categorical and hypothetical syllogisms: so-called relational syllogisms (Barnes 1993, Hankinson 1994a). Though Galen does not provide a clear characterization of relational syllogisms, they seem to be arguments whose validity depends on the meaning of relational terms. Thus the validity of the first example Galen gives: "Theon has twice as much as Dion, Philon has twice as much as Theon, therefore Philon has four times as much as Theon" (XVI.1), depends on the relation "has twice as much". Although only the three figures of the categorical syllogism identified by Aristotle are recognized in the *Institutio logica* (XII.1), it has been argued that he originated the fourth figure of traditional logic, though this remains a matter of dispute (Rescher 1966, Hülser 1992).

Demonstration was a paradigm of the rational method according to Galen, and he sometimes faults Rationalists for paying insufficient attention to demonstration (*MM* X 32, 2–33, 5 K). The value that Galen assigns to demonstration would seem to make him a natural Rationalist, and he was a Rationalist in his own scheme of classification, according to which Rationalism is the position that reason has an important contribution to make to medical knowledge over and above experience (*De sectis ingredientibus*, SM III 1, 15–16=I 65, 6 K; *Diff. feb.* VII 281, 16–282, 5 K; *Hipp. epid.* XVII A 13, 14–14, 1 K). All the same, he is extremely sympathetic to Empiricism. He maintained that an Empiricist can be an accomplished and effective physician (*MM* X 122, 11–12 K), and he wrote the *Subfiguratio empirica* to show that it is possible to master an adequate art of medicine through experience alone and without the aid of reason, even if it is a limited art that does not include all medical knowledge that might be useful to a physician (Deichgräber 1965, 88, 19–25). Galen thinks that only experience can discover some valuable truths (*MM* X 962, 6 K; *Comp. med. gen.* XIII 886, 17–887, 2 K) and that experience has a part to play confirming the conclusions of reason (*Comp. med. gen.* XIII 376, 2–4 K; *Hipp. epid.* XVII A 13, 14–14, 14 K) (Frede 1981, Hankinson 2008b).

Galen's philosophical debts, acknowledged and unacknowledged, are many. He proudly identified himself as an eclectic, who selects the best that each school has to offer (*Libr. propr.* SM II 95, 8–9=XIX 13, 16–18 K) (Hankinson 1992). He strove to follow his father's advice not to commit oneself to a sect, but to adopt views only after carefully evaluating them (*Aff. dig.* CMG V 4.1.1, 28, 25–29, 2=V 42, 11–14 K). He also took care to distinguish between matters about which he has knowledge, those about which he is in position only to hold a plausible opinion, and those about which even this is impossible (*Prop. plac.* 187, 10–13; 188, 6–13 Boudon-Millot and Pietrobelli 2005 = CMG V 3.2, 108, 25–110, 3; 114, 8–19; *Subst. nat. fac.* IV 759, 18–760, 3 K).

Consistently with his epistemological views, Galen suspended judgment about many of the question that occupied natural philosophy. He does not know whether the world was generated or is eternal nor what the nature or substance of god or the soul may be (*Prop. plac.* 172, 31–173, 18 Boudon-Millot and Pietrobelli 2005 = CMG V 3.2, 56, 12–60, 8). About matters outside the cosmos (the world or world system as opposed to the universe), for example whether there is an infinite void and whether the universe contains *cosmoi* apart from ours infinite in number, he held that plausibility is the best we can hope for (*Pecc. dig.* CMG V 4.1.1 62, 18–28; 66, 15–18=V 93, 4–16; 100, 3–6 K).

He took a particular interest in theology. Though unable to resolve questions about god's substance—whether god has a body or is incorporeal—he does not doubt that god exists, that he reveals himself through dreams and divination and that he is the creator of the world and all living things. He is an ardent proponent of teleology. In this he follows Plato and Aristotle, though like the former and unlike the latter he holds that the beneficial end-oriented arrangements that are everywhere in evidence are products of design, the creation of a divine demiurge (Hankinson 1989). As a doctor with extensive (and in his day probably unrivalled) anatomical knowledge, he was in a position to demonstrate in detail the purposes served by the organs of the body, for which he holds they were created by god. This is the object of the *De usu partium*, an immense work in seventeen books that he describes as a hymn of praise to the gods (II 451, 19–27 Helmreich=IV 365, 13–366, 5 K; cf. 446, 3–19 Helmreich=IV 358, 8–359, 6 K; *PHP* CMG V.4.1.2, 596, 5–598, 5=V 789, 13–791, 17 K) (Translation: May 1968).

Causation and explanation were another major area of interest to Galen. Unsurprisingly he was much influenced by Platonic and Aristotelian thinking. He distinguished five kinds of causes, the final, the efficient, the material, the instrumental and the formal, assigning the most importance to the final cause (*UP* I 338, 20–339, 18 Helmreich=III 464, 6–465, 10 K). Galen was also influenced by another tradition, however, which seems ultimately to go back to the Stoa, though it reached him in a form influenced by medical theorists, especially the so-called Pneumatic school. Galen makes extensive use of causal categories from this framework in his work, and they were also the subject of two specialized monographs of his, the *De causis procatarcticis* (Hankinson 1998) and the *De causis contentivis* (Lyons 1969). This framework recognizes not only the antecedent (*aition prokatarktikon*) and containing cause (*atition sunektikon*), but also the preceding cause (*aition proēgoumenon*). The first two are clearly of Stoic origin; the Stoic provenance of the last is less certain (Hankinson 2003). The antecedent cause of a disease is the evident occurrence external to the body that sets in train the chain of events that gives rise to the disease and that is no longer active when the disease is present, for example, heating or chilling. It need not necessitate this effect to qualify as its cause, but usually depends on the cooperation of other causal factors, especially the presence of pre-disposing factors inside the body. An antecedent cause that would bring about the disease in a weaker constitution will leave a stronger constitution none the worse. Moreover in cases where disease does result, its intensity need not vary in proportion to the intensity with which the antecedent cause acts. The containing cause of the disease, on the other hand, acts simultaneously with the disease that is its effect, is a sufficient condition for it and is responsible for variations in its intensity that vary in direct proportion to the intensity with which it acts. Antecedent causes are sometimes treated as a species of preceding cause, but the term 'preceding cause' is more typically applied to internal causes that belong to the sequence set in train by the antecedent cause and

coming between it and the containing cause. All three forms of cause are most easily viewed as corresponding, at least roughly, to Aristotle's efficient cause. They were not used only to explain disease, but could also be applied to normal bodily functions, for example, the pulse (*Caus. puls.* IX 1, 1–3, 15 K).

Galen was also greatly interested in the soul. Though the study of the soul was part of natural philosophy, much of what Galen has to say belongs to moral psychology. Though unsure about the substance of the soul and unable to say whether it, or any part of it, is immortal, he accepted Plato's division of the soul into three parts, each occupying a distinct seat in the body, the rational part located in the head, the spirited or emotional part in the chest and the appetitive part in the liver (*PHP* CMG V 4. 1.2, 312, 25–31=V 454, 10–18 K; *QAM* SM II 36, 9–12=IV 772, 15–18 K). In Galen's version of the division, however, the third part of the soul combines the functions of Plato's appetitive soul with those of Aristotle's vegetative soul (*QAM* SM II 44, 10–13=IV 782, 12–14 K; *Foet. form.* CMG V 3.3, 104, 17–18 =IV 700, 7–10). Galen believed that his anatomical researches had proved Plato's thesis (*Foet. form.* CMG V 3.3, 106, 3–7 = IV 701, 10–14 K). Much of the *De placitis Hippocratis et Platonis* was dedicated to this and related issues. Galen's Platonic (or as he thought Platonic–Hippocratic) position was in conflict with that of the Stoics, according to whom the ruling part of the soul or *hēgemonikon* consists of a single power or faculty, reason, which has its seat in the chest. They held that the so-called affections of the soul (*pathē*), that is, emotions and desires, are not due to faculties distinct from reason, but are rather erroneous judgments of reason, and *PHP* contains a long polemic against the Stoic Chrysippus (Tieleman 1996).

Galen also disagrees in part with Aristotle and the middle Stoic Posidonius. According to him, they recognized reason, emotion and desire as three distinct power or faculties of the soul, though they did not regard them as distinct parts of the soul with separate seats in different parts of the body (*PHP* CMG V 4.1.2, 312, 31–34=V 454, 18–455, 4 K). (He may have exaggerated the extent to which Posidinius dissented from Stoic orthodoxy (Cooper 1998)). It is enough for the purpose of ethics, Galen believed, that the three powers be recognized, and he notes that Plato tackles the two issues separately: dealing with what the faculties of the soul are in *Republic* book four, and whether they have separate seats in the body in the *Timaeus* (*Prop. plac.* 180, 11–23 Boudon-Millot and Pietrobelli 2005 = CMG V 3.2 82, 9–15; *PHP* V 4.1.2, 336, 21–338, 14 = V 480, 2–481, 17 K).

In a way that likely reflects his medical background, Galen devoted special attention to the interaction between the soul and the body. His book, *Quod animi mores corporis temperamenta sequantur*, defends the thesis that the powers of the soul are influenced by the temperament of the body (SM II 32–79=IV 767–822 K) (translation in Singer 1997, discussion in Lloyd 1988). He touches on, but does not come seriously to grips with, the issues of moral responsibility raised by this thesis (SM II 73, 3–74, 21=IV 814, 8–816, 7 K). He believes that a better understanding of the way the temperament of the body affects the soul and how the soul can therefore be influenced by nourishment and other factors will be of help to those who wish to improve their own character and that of others. The *De propriorum animi cuiuslibet affectuum dignatione et curatione* and the *De animi cuiuslibet peccatorum dignotione et curatione*, which are actually a single work, also offer practical advice about moral self-improvement. We should, Galen maintains, investigate our own failings and strive to eliminate or reduce them (De Boer 1937 =V 1–57, 58–103 K; English trans. in Singer 1997). To this end, he recommends cultivating friends who will tell us when we are in the wrong. The distinction between

affections (*pathē*) and errors (*hamartēmata*) is grounded in the division of the soul into three parts (cf. *PHP* CMG V 4.1.2, 242, 32–244, 9=V 371, 15–372, 17 K). The former arise owing to impulses in irrational parts of the soul; the latter are errors of reason due to a false judgment (*doxa*, *krisis*), though Galen allows that they may be influenced by the affections (*Aff. dig.* CMG V 4.1.1, 7, 1–2=V 7, 12–13 K). The means of curing them are correspondingly different. The spirited part may be tamed or persuaded (*Aff. dig.* CMG V 4.1.1, 19, 1–7, 18–20=V 26, 17–27, 6; 28, 1–3 K), and Galen, like Plato, recommends making it the ally of the rational element in opposition to the appetitive part. The appetitive part is beyond the reach of persuasion; it responds only to chastisement (*kolasis*) and should be kept as weak as possible (*Aff. dig.* CMG V 4.1.1, 19, 20–25=V 28, 3–10 K).

Intellectual errors are possible both about the end of life (*telos*) or what follows from or is consistent with it (Donini 1988). When not about evident matters, where direct observation is the cure, errors are to be cured by proof (*Pecc. dig.* CMG V 4.1.1, 43, 3–11= V 61, 4–15 K). Galen therefore regarded proof as indispensable not only in the theoretical and scientific realms, but also for the achievement of happiness (*Pecc. dig.* CMG V 4.1.1, 47, 8–12=V 68, 8–13 K). The *De moribus* was similar in theme and aims, though with a special focus on states of character, which are conditions of the soul that give rise to action without deliberation or reflection (Walzer 1954, Maróth 1994). Though due in good part to nature, they can also be produced or modified by habit, and Galen believes that there is some scope for improving our states of character but, as Aristotle also believed, bad states of character, once fixed, may be impossible to eradicate.

Galen lists many works on ethical themes in the *De libris propriis*, which range beyond the issues tackled in the moral psychological works which have survived (SM II 121, 5–122, 6=XIX 45, 9–46, 10 K). One work, now lost, was about what follows from each end, meaning, perhaps, the ends set up by the different schools (*Pecc. dig.* CMG V 4.1.1, 52, 12–13; 53, 11–14=V 76, 11–13; 77, 13–78 3 K; cf. *Libr. propr.* SM II 121, 19–20=XIX 46, 2–3 K). Arabic sources inform us that Galen himself espoused the Platonic view that the highest end of human life is likeness to god (Walzer 1949, Strohmaier 2003).

A Guide to reading Galen

Galen was an exceptionally prolific author, and though many of his writings have been lost—some of them owing to the fire that destroyed his private library in Rome in AD 192—a very large number have survived. The *Opera Omnia* in twenty volumes edited by C. G. Kühn in 1821–33 (K) is the closest thing to a standard edition. It contains many works falsely attributed to Galen, however, while omitting many genuine works, and the texts that it prints are not critical editions based on a study of the manuscripts; Kühn often simply reprinted texts from Renaissance editions. Because of the influence Galen exerted over the centuries and on more than one culture, the transmission of his works was sometimes complex in the extreme. His works were translated into Syriac, Arabic, Hebrew and Medieval Latin, and in some cases they survive only in translation, including translations based not on Galen's Greek but an intermediate translation into another language. The late nineteenth century witnessed a flurry of editorial activity, providing us with critical editions of many important works, notably three volumes of Scripta minora (SM) (Marquardt et al. 1884–1893). The *Corpus Medicorum Graecorum*, (CMG) published by the Berlin Akademie, which has added to this total and continues to publish new editions accompanied by translations into a modern language. An ambi-

tious complete edition has been undertaken by the Collection Budé, some volumes of which have already appeared. A list of editions and English translations can be found in Hankinson 2008: 391–403. Galen is a rich source of fragments of writings from (among other figures and schools) the medical Empiricists (Deichgräber 1965), Herophilus (Von Staden 1989), Diocles of Carystus (Van der Eijk 2000–1), and the Methodists (Tecusan 2004). The last three collections include English translations. A selection of key texts in French translation can be found in Moraux 1985. A selection of works providing a good introduction to Galen are presented in English translation in Singer 1997. English translations of Galen's works on the controversy between the Rationalists and Empiricists (with some discussion of Methodism) are contained in Walzer and Frede 1985.

References and Further reading

Editions, translations and collections of fragments

Barigazzi, A. (1991, ed. and trans.) *Galeno sull'ottima maniera d'insegnare, esortazione alla medicina*, Berlin: Akademie-Verlag. (CMG V 1,1)

Boudon, V. (2002, ed. and trans.) *Galien: Exhortation à l'étude de la médecine, Art medical*, Paris: Les Belles Lettres.

Boudon-Millot, V., Pietrobelli, A. (2005, edd.) "Galien ressuscité: Édition *princeps* du texte grec du *de propriis placitis*," *Revue des études grecques* 118: 168–213.

Boudon-Millot, V. (2007, ed.) *Galien: Introduction general, Sur l'ordre de ses propres livres, Que l'excellent médecin est aussi philosophe*, Paris: Les Belles Lettres.

Boulogne, J., (2009, trans.) *Galien: Méthode de traitement*, Paris: Gallimard.

De Boer, W. (1937, ed.) *Galeni De propriorum animi cusuiuslibet affectuum dignatione et curatione, De animi cuiuslibet peccatorum dignotione et curatione, De atra bile*, Berlin: Akademie-Verlag. (CMG V 4,1.1)

Deichgräber, K. (2nd edn. 1965, ed.) *Die griechische Empirikerschule: Sammlung der Fragmente und Darstellung der Lehre*, first edn. 1930, Berlin: Weidmann.

De Lacy, P. (1978–84, ed. and trans.) *Galen: On the Doctrines of Hippocrates and Plato*, Berlin: Akademie-Verlag. (CMG V 4,1,2)

Hankinson, R. J. (1991, trans.) *Galen: On the Therapeutic Method Books I and II*, Oxford: Oxford University Press.

Hankinson, R. J. (1998, ed. and trans.) *Galen: On Antecedent Causes*, Cambridge: Cambridge University Press.

Helmreich, G. (1907, ed.) *Galeni: De usu partium*, Leipzig: Teubner

Johnston, I., Horsley, G. H. R. (2011, ed. and trans.) *Galen: Method of Medicine*, Cambridge, MA, and London: Harvard University Press.

Kalbfleisch, K. (1896, ed.) *Galeni Institutio Logica*, Leipzig: Teubner.

Kieffer, J. (1964 trans.) *Galen's Institutio Logica*, Baltimore: Johns Hopkins University Press.

Kühn, C. G. (1821–33, ed.) *Galeni Opera Omnia*, Leipzig: Cnobloch; repr. Hildesheim: Olms, 1965.

Kraus, P., Walzer, R. (1951, edd.) *Galeni Compendium Timaei Platonis*, London: Warburg Institute. (*Plato Arabus I*)

Lyons, M. C., Schoene, H., Kalbfleisch, K., Kollesch, J., Nickel, D., Strohmaier, G. (1969, ed. and trans.) *Galen: On the Parts of Medicine, On Cohesive Causes, On Regimen in Acute Diseases in Accordance with the Theories of Hippocrates*, Berlin: Akademie-Verlag. (CMG *Supplementum Orientale 2*)

Mattock, J. N. (1972) "A Translation of the Arabic Epitome of Galen's Book *Peri Ēthōn*" in S. M. Stern, A. Hourani and V. Brown (eds) *Islamic Philosophy and the Classical Tradition*, Oxford: Oxford University Press.

May, M. T. (1968) *Galen on the Usefulness of the Parts of the Body*, Ithaca: Cornell University Press.

Marquardt, J., Müller, I. v., Helmreich, G. (1884–1893) *Claudii Galeni Pergameni Scripta minora*, Leipzig: Teubner.

Mau, J. (1960 trans.), *Galen Einführung in die Logik*, Berlin: 1960.

Rescher, N. and Marmura, E. (1965, ed. and trans.) *A Refutation by Alexander of Aphrodisias of Galen's Treatise on the Theory of Motion*, Islamabad: Islamic Research Institute.

Schröder, O. and Kahle, P. (1934) *Galeni In Platonis Timaeum commentarii fragmenta*, Leipzig: Teubner [CMG Suppl. I].
Singer, P. N. (1997) *Galen: Selected Works*, Oxford: Oxford University Press.
Singer, P. N. (ed.) (2013) *Galen: Psychological Writings*, Cambridge: Cambridge University Press (includes translations into English of four treatises).
Tecusan, M. (2004, ed. and trans.) *The Fragments of the Methodists: Methodism outside Soranus*, Leiden: Brill.
Van der Eijk, P. (2000–1, ed. and trans.) *Diocles of Carystus: A Collection of Fragments with Translation and Commentary*, Leiden: Brill.
Von Staden, H. (1989, ed. and trans.) *Herophilus: The Art of Medicine in Early Alexandria*, Cambridge: Cambridge University Press.
Walzer, R. (1949) *Galen on Jews and Christians*, Oxford: Oxford University Press.
Walzer, R. (1954) "A Diatribe of Galen," *Harvard Theological Review* 47: 243–254; repr. in R. Walzer (1962) *Greek into Arabic*, Oxford: Oxford University Press.
Walzer, R. and Frede, M. (1985 trans.) *Galen: Three Treatises on the Nature of Science*, Indianapolis, IN: Hackett.

Secondary Works

Allen, J. (2010) "Pyrrhonism and Medicine" in R. Bett (ed.) *The Cambridge Companion to Ancient Scepticism*, Cambridge: Cambridge University Press: 232–4.
Barnes, J. (1991) "Galen on Logic and Therapy", in Kudlien and Durling (eds.) (1991): 50–102.
Barnes, J. (1993) "'A third sort of syllogism': Galen and the logic of relations", in R. Sharples (ed.), *Modern Thinkers and Ancient Thinkers: The Stanley Victor Keeling Memorial Lectures at University College London, 1981–1991*, London: UCL Press: 172–194.
Barnes, J. (1997) "Logique et pharmacologie. À propos de quelques remarques d'ordre linguistique dans le De simplicium medicamentorum temperamentis ac facultatibus de Galien" in A. Debru (ed.) (1997): 3–33.
Barnes, J. (2002), "Galen, Christians, Logic" in T. P. Wiseman (ed.) *Classics in Progress: Essays on Ancient Greece and Rome*, Oxford: Oxford University Press: 399–417. repr. in idem *Logical Matters: Essays in Ancient Philosophy II*, Oxford: Oxford University Press: 1–21.
Barnes, J. (2003) "Proofs and Syllogisms in Galen" in Barnes and Jouanna (eds.) (2003), 1–24.
Barnes, J. and Jouanna, J. (eds.) (2003) *Galien et la philosophie*, Geneva: Fondation Hardt. (Entretiens sur l'antiqité classique Tome XLIX)
Bobzien, S. (2002) "Pre-Stoic Hypothetical Syllogistic in Galen's Institutio logica" in: V. Nutton (ed.) (2002): 57–72.
Boudon, V. (2003) "Art, science et conjecture chez Galien" in J. Barnes and J. Jouanna (eds.) (2003): 269–305.
Chiaradonna, R. (2009) "La traité de Galien *Sur la Démonstration*et sa postériorité' tardo-antique" in R. Chiaradonna and F. Trabattoni (eds.), *Physics and Philosophy of Nature in Greek Neoplatonism*, Leiden: Brill: 43–77.
Cooper, J. (1998) "Posidonius on Emotions" in: J. Sihvola and T. Endberg-Pedersen (eds.), *The Emotions in Hellenistic Philosophy*, Dordrecht: Reidel: 71–112. (repr. in idem *Reason and Emotion Essays on Ancient Moral Psychology and Ethical Theory* (Princeton 1999)).
Debru, A. (ed.) (1997) *Galen on Pharmacology Philosophy, History and Medicine*, Leiden: Brill.
De Lacy, P. (1972) "Galen's Platonism" *American Journal of Philology* 93: 27–39.
De Lacy, P. (1988) "The Third Part of the Soul" in P. Manuli and M. Vegetti (eds.) (1988): 43–63.
Donini, P. (1980), "Motivi filosofici in Galeno" *La parola del passato* 35: 333–370.
Donini, P. (1988) "Tipolologia degli errori e loro correzione secondo Galeno" in P. Manuli and M. Vegetti (eds.) (1988): 65–116.
Donini, P. (2008) "Psychology" in R. Hankinson (ed.) (2008a): 184–209.
Frede, M. (1981) "On Galen's Epistemology" in V. Nutton (ed.) (1981): 65–86.
Frede, M. (1982) "The Method of the So-Called Methodical School of Medicine" in J. Barnes, J. Brunschwig, M. Burnyeat and M. Schofield (eds.), *Science and Speculation*, Cambridge: Cambridge University Press: 1–23.
Frede, M. (2003) "Galen's Theology" in J. Barnes and J. Jouanna (eds.) (2003): 73–126.
Frede, M. (2011) "An Anti-Aristotelian Point of Method in Three Rationalist Doctors" in B. Morison and K. Ierodiakonou (eds.), *Episteme, etc.: Essays in Honour of Jonathan Barnes*, Oxford: Oxford University Press: 115–137.

Gill, C., (2007) "Galen and the Stoics: Mortal Enemies or Blood Brothers?" *Phronesis* 52: 88–120.
Gill, C., Whitmarsh, T. and Wilkins, J. (eds.) (2009) *Galen and the World of Knowledge*, Cambridge: Cambridge University Press.
Hankinson, R. J. (1989) "Galen and the Best of All Possible Worlds" *Classical Quarterly* 39: 206–227.
Hankinson, R. J. (1991) "Galen's Anatomy of the Soul" *Phronesis* 36: 197–233.
Hankinson, R. J. (1992) "Galen's Philosophical Eclecticism" *Aufstieg und Niedergang der Römischen Welt* II.36.5: 3505–3522.
Hankinson, R. J. (1994a) "Galen and the Logic of Relations" in L. P. Schrenk (ed.), *Aristotle in Late Antiquity*, *Studies in Philosophy and the History of Science* 27: 57–75.
Hankinson, R. J. (1994b) "Galen's Concept of Scientific Progress" *Aufstieg und Niedergang der Römischen Welt* II.37.2: 1775–1789.
Hankinson, R. J. (2003) "Causation in Galen" in J. Barnes and J. Jouanna (eds.) (2003): 31–66.
Hankinson, R. J. (ed.) (2008a) *The Cambridge Companion to Galen*, Cambridge: Cambridge University Press.
Hankinson, R. J. (2008b) "Epistemology" in R. J. Hankinson (ed.) (2008a): 157–183.
Hankinson, R. J. (2009) "Galen on the Limitations of Knowledge" in C. Gill et al. (eds.) (2009): 206–42.
Hülser, K. (1992) "Galen und die Logik" Aufstieg und Niedergang der Römischen Welt II.36.5: 3523–3554.
Kollesch, J. and Nickel, D. (eds.) (1993) *Galen und das hellenistische Erbe*, Stuttgart 1993. (*Sudhoffs Archiv Zeitschrift für Wissenschaftsgeschichte* Heft 32)
Ioppolo, A. M. (1993) "The Academic Position of Favorinus of Arelate" *Phronesis* 38: 193–213.
Kudlien, F. and Durling, R. J. (eds.) (1991) *Galen's Method of Healing*, Leiden: Brill.
Kupreeva, I. (2004) "Aristotelian Dynamics in the 2nd Century School Debates: Galen and Alexander of Aphrodisias on Organic Powers and Movements" in P. Adamson, H. Baltussen and M. Stone (eds.), *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries* 1, BICS Suppl. 83.1: 71–95.
Lloyd, G. E. R. (1988) "Scholarship, Authority and Argument in Galen's Quod Animi Mores", in P. Manuli and M. Vegetti (eds.) (1988): 11–42.
Lloyd, G. E. R. (1996) "Theories and Practices of Demonstration in Galen", in M. Frede and G. Striker (eds.), *Rationality in Greek Thought*, Oxford: Oxford University Press, 255–278.
López Férez, J. A. (ed.) (1991) *Galeno: obra, pensamiento e influencia*, Madrid: UNED.
Manuli, P. and Vegetti, M. (ed.) (1988) *Le opere psicologiche di Galeno*, Naples: Bibliopolis.
Maróth, M. (1994) "Galen als Seelenheiler" in J. Kollesch and D. Nickel (eds.) (1994): 145–156.
Moraux, P. (1976) "Galien et Aristote" in F. Bossier et al. (eds.) *Images of Man in Ancient and Medieval Thought*, Leuven: Leuven University Press: 127–146.
Moraux, P. (1981) "Galien comme philosophe: la philosophie de la nature" in V. Nutton (ed.) (1981): 87–116.
Moraux, P. (1984) *Der Aristotelismus bei den Griechen: von Andronikos bis Alexander von Aphrodisias* 2 vols., Berlin: De Gruyter. (vol. 2, 687–808 is about Galen)
Moraux, P. (1985) *Galien de Pergame: Souvenirs d'un Médecin*, Paris: Les Belles Lettres.
Morison, B. (2008) "Logic" in R. J. Hankinson (ed.) (2008a): 66–115.
Müller, I. von (1897) "Über Galens Werk vom wissenschaftlichen Beweis", *Abhandlungen der königlichen Bayerischen Akademie der Wissenschaften, philosophisch-philologische Klasse* 20: 403–78.
Nutton, V. (ed.) (1981) *Galen: Problems and Prospects*, London: Welcome Institute.
Nutton, V. (ed.) (2002) *The Unknown Galen* (*Bulletin of the Institute of Classical Studies, Supplement* 77).
Nutton, V. (2004) *Ancient Medicine*, London: Routledge.
Pines, S. (1961) "Omne quod movetur necesse est ab aliquo moveri: A Refutation of Galen by Alexander of Aphrodisias and the Theory of Motion" *Isis* 52: 21–54.
Rescher, N. (1966) *Galen and the Syllogism: An Examination of the Thesis that Galen Originated the Fourth Figure of the Syllogism in the Light of New Data from Arabic Sources including An Arabic Text Edition and Annotated Translation of Ibn al-Salah's Treatise "On the Fourth Figure of the Categorical Syllogism"*, Pittsburgh: Pittsburgh University Press.
Schiefsky, M. (2005) Hippocrates *On Ancient Medicine*, Leiden: Brill.
Schiefsky, M. (2007) "Galen's Teleology and Functional Explanation" *Oxford Studies in Ancient Philosphy* 33: 396–400.
Strohmaier, G. (2003) "Die Ethik Galens und ihre Rezeption in der Welt des Islams" in J. Barnes and J. Jouanna (eds.): 307–326.
Temkin, O. (1973) *Galenism Rise and Decline of a Medical Philosophy*, Ithaca: Cornell University Press.

Tieleman, T. (1996) *Galen and Chrysippus on the Soul: Argument and Refutation in the De Placitis Books II–III*, Leiden: Brill.
Tieleman, T. (2003) "Galen's Psychology" in J. Barnes and J. Jouanna (eds.) (2003): 131–161.
Tieleman, T. (2002) "Galen on the Seat of the Intellect: Anatomical Experiment and Philosophical Tradition" in T. Rihll and C. J. Tuplin (eds.) *Science and Mathematics in Ancient Greek Culture*, Oxford: Oxford University Press: 256–273.

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10. Plato's philosophical method: enquiry and definition
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30. The Stoic system: ethics and nature
31. The Stoic system: logic and knowledge
39. Middle Platonism

41
SEXTUS EMPIRICUS

Svavar Hrafn Svavarsson

Introduction

A doctor associated with the Empirical school of medicine, at work perhaps in the late second century (House 1980), Sextus Empiricus is a Pyrrhonist skeptic. His skepticism belongs to the tradition established in the early first century BC by Aenesidemus, who, rebelling against the mitigated skepticism of Academic philosophers, sought inspiration in the philosophy of Pyrrho. While we have limited reports of the views of Aenesidemus, we possess three groups of works credited to Sextus. *Against the Dogmatists* (*Pros mathēmatikous*, hereafter *Math.*) is divided into two parts. The first six books in the traditional ordering contain arguments directed at practitioners of liberal arts (grammarians, rhetoricians, geometricians, arithmeticians, astrologists, musicians). Books 7–11 are part of a different work. Here Sextus advances arguments against philosophers: logicians (7–8), physicists (9–10), and ethicists (11). These five books, containing expositions of and arguments against specific stances, are missing an introductory or general account, where Sextus explains his skepticism. The third group is perhaps his most mature work, called *Outlines of Pyrrhonism* (*Pyrrhōneioi hypotypōseis*, hereafter *Pyr.*), in three books, of which the latter two are short and slightly different (arguably more sophisticated) versions of *Math.* 7–11, while the first is a general account of Pyrrhonist skepticism. It is this book which is the most widely read.

Introducing key concepts in his explanation of skepticism, Sextus is concise: "Skepticism is an ability to set out oppositions among things which appear and are thought of in any way at all, an ability by which, because of the equipollence (*isostheneia*) in the opposed objects and accounts, we come first to suspension of belief (*epochē*) and afterwards to tranquility (*ataraxia*)" (*Pyr.* 1.8). Tranquility is both the aim and result of Pyrrhonism (*Pyr.* 1.12, 25–26). This defining feature is foreign to other forms of skepticism, ancient or modern. Both versions of ancient skepticism, however, share one feature foreign to later skepticism. Ancient skeptics were supposed to be able to live consistently with their skepticism, that is, consistently suspending belief and thus (in some sense) having no beliefs. We shall consider both the argumentative and practical sides of the Pyrrhonism of Sextus Empiricus.

1 Arguments and appearances

1.1 The modes of Aenesidemus

In the opening chapters of the *Outlines* Sextus explains the arguments that the Pyrrhonist employs, the basic feature of which is the claim that to any appearance (*phantasia*) she

can oppose another appearance. We learn that an object appears F and not-F depending on the relation between the different (or differently situated) subjects of the appearance and the appearing object. Sextus enumerates ten relations in his account of the so-called modes of Aenesidemus (*Pyr.* 1.36–163). (On these modes, see Striker 1983; Annas and Barnes 1985; Woodruff 2010. Other sources preserve different accounts of the modes, notably Philo of Alexandria, *On Drunkenness* 169–202; Diogenes Laertius 9.78–88):

(1) The same object appears differently to different animals, because these have different origins and are differently constituted, especially in their sensory organs.
(2) The same object appears differently to different people, who have different bodily and mental constitutions.
(3) The same object appears differently to the different senses.
(4) The same object appears differently to one and the same observer according to circumstances.
(5) The same object appears differently depending on position, distance, and place.
(6) The same object appears differently depending on how it is mixed with the medium by which it affects one.
(7) The same object appears differently depending on its quantity and composition.
(8) The same object appears differently depending on the relation that holds between it and the observer. This mode encompasses all the other modes.
(9) The same object appears differently depending on its constant or rare occurrence.
(10) Different ways of life, customs, laws, myths, and dogmatic assumptions that depend on some kind of proof can all be opposed one to the other.

In short, Sextus observes that (i) x appears F in relation A, and that (ii) x appears not-F in relation B. The eighth mode is important. The examples mentioned by Sextus and other sources may indicate that he changed this mode, originally intended to be parallel to others, by superimposing it on them. The tenth mode, in relating different laws and customs, is seemingly intended to shock the reader, mentioning human sacrifices and public copulation. More importantly, it includes beliefs that rest on arguments such as "that there are atomic elements of things, or homoeomeries, or least parts, or something else" (*Pyr.* 1.147). This inclusion shows that the modes were supposed to be generally applicable. The opposed appearances can be perceptual and non-perceptual, as indeed Sextus states when introducing the modes (*Pyr.* 1.31–34). The relations, then, mentioned in the eighth mode, can include arguments as reasons for holding beliefs.

Beliefs of philosophers are the object of Sextus' discussions in the special parts of his work (*Pyr.* 2–3 and *Math.* 7–11). Here Sextus offers an exposition of beliefs that there are certain fundamental things, such as truth, signs, causes, natural goods and evils. Then he "destroys" these things by arguing either that they cannot be known or that there simply are no such things. In this way he produces the required oppositions between beliefs. This negative way of arguing against dogmatic philosophers is identical to that of Aenesidemus as testified by Photius (*Bibl.* 170b3–35; on Aenesidemus, see Schofield 2007 and Hankinson 2010).

While the observation that appearances can be opposed is neither controversial nor especially skeptical, Sextus suggests that, on pain of contradiction, the opposed appearances cannot both be true (cf. *Pyr.* 1.88), although they could both be false; the appearances are contraries. Indeed, this assumption is basic to the skeptic's enterprise; what gets the skeptic started is his anxiety caused by the conflict of appearances. So, Sextus adds that (iii) x cannot both be F and not-F. By this move, Sextus also assumes that, if x is really or by nature F, then it is invariably F, for otherwise its variability could explain its different appearances. He also distances himself from relativism, which embraces the claim, as an appeal to the best explanation, that x really is F and not-F relative to different observers.

At this stage Sextus makes a striking claim. Confronted with contrary appearances, the Pyrrhonist is neither able to prefer one appearance to the other as revealing how the appearing object really is, nor indeed to dismiss both. The reason she cannot prefer one appearance to the other as revealing reality is that she finds the relations between the object of the appearance and the different subjects equally believable. She cannot prefer one relation to the other. We can put this differently: one account justifying an appearance as true is as believable as another account of the same object justifying a contrary appearance. For the Pyrrhonist each appearance is as believable as the other because each account is as believable as the other. So, (iv) one cannot prefer A to B.

If one is in the state of finding opposed appearances equally believable because of the equal believability of the different accounts, Sextus submits, a psychological reaction is triggered, at least if one has skeptical sensibilities: (v) one suspends belief as to whether x is F or not-F, or neither. It is this psychological reaction or affection (*pathos*)—he also calls it an appearance—that actually reveals that one is confronted with equipollence. One suspends belief in this sense if and only if one finds the accounts equally believable. Inasmuch as Sextus explains suspension of belief as an affection, he distinguishes it from a rational inference (Barnes 1982; Perin 2010b offers a different account). This delicate distinction is of great importance for understanding the skeptical project. Sextus suggests that the skeptic is causally affected by equipollence to suspend belief, as opposed to rationally concluding to suspension of belief; she just finds herself suspending belief.

In his report of the modes of Aenesidemus Sextus suggests that in deciding between the relative merits of accounts of appearances, the skeptic finds the accounts equally believable. He mentions different considerations in this context (Striker 1983). In the second mode, one cannot appeal to the majority view, which cannot be established (*Pyr.* 1.89). In the fourth mode he suggests that one cannot appeal to the normal person, for her appearances are no more natural than those of the abnormal person (*Pyr.* 1.102–3). The second and third both dismiss appeals to the wise person, for the wise are in perpetual disagreement (*Pyr.* 1.88, 98): Epicureans appeal to Epicurus and Platonists to Plato. The basic point, however, is that everyone is in a certain relation when things appear to them; hence everyone is in this way biased from the outset (cf. *Pyr.* 1.112–13). The realization that each relation is as believable as the other certainly does not imply that things stop appearing to the skeptic, but for her it means that she can only say how things appear to her but not whether they are as they appear.

1.2 The modes of Agrippa

By explaining the modes of Aenesidemus in terms of relations, Sextus uses one of the modes of Agrippa (discussed in *Pyr.* 1.164–77) as generally applicable to all the modes

of Aenesidemus, namely the mode of relativity. Nothing is known about Agrippa, but these modes collect forms of argument going back at least to Aristotle. (On these modes, excluding that of relativity, see Barnes 1990). Since the modes of Aenesidemus exemplify the Pyrrhonist argument, and there are other modes of Agrippa, these are of another order than the mode of relativity. There are four other Agrippan modes: undecided dispute, infinite regress, hypothesis, and circularity. Undecided dispute is a precondition for all skeptical maneuvers that rely on opposing appearances. Insofar as the dispute is undecided (*Pyr.* 1.165), simply because one has not been able to choose between appearances, suspension of belief is presented as the outcome. In his account of this mode, Sextus neither mentions equipollence as the source of undecidability nor the relevance of relations. This mode is descriptive of the basic insight of the skeptical enterprise, namely that of pitting together opposed appearances and being unable to decide between them regardless of the accounts that could be made to justify them.

The three remaining modes of Agrippa indicate that there are other ways of inducing suspension of belief than by finding different accounts equally believable. If one attempts to decide between contrary appearances by suggesting a rational justification for preferring one of them as believable, then one falls prey to the mode of infinite regress, hypothesis, or circularity. (1) An argument that is supposed to justify a conclusion is itself in need of another justification, and so on *ad infinitum*. This leaves one bereft of a foundation upon which to build beliefs, so that suspension of belief follows. (2) Otherwise one would have to prefer one justification as believable simply by assuming the foundation without any argument. Since this is unacceptable, one is led to suspension of belief. (3) Finally, the mode of circularity is brought to bear on arguments for a claim that themselves require the assumption of that claim. Again the procedure is unacceptable and is attended by suspension of belief. Thus attempts at justifying the acceptance of one of the appearances as believable fails, and issue in the claim that one cannot know that the appearance is true, and should suspend belief.

This general strategy does not lead to equipollence, the equal believability of contrary accounts, an integral part of the skeptical project, but rather just to suspension of belief. In fact Sextus does not mention equipollence when discussing the Agrippan modes. Further, this suspension of belief is not explained as an affection or a psychological reaction in the manner of the suspension following equipollence of contrary accounts. Sextus makes frequent use of them, however, both in his special arguments against the dogmatists, and in his description of the modes of Aenesidemus (*Pyr.* 1.60–61, 114–17, 121–123). He uses them in order to show that attempts at justifying a particular truth claim fail. Indeed, these modes of Agrippa constitute a topic neutral argumentative strategy designed to counter any truth claim with the conclusion that it cannot be known whether the claim is true. Insofar as they are used to discredit a particular truth claim, however, they can be used to establish equipollence between it and the conclusion of the Agrippan argument: one has no more reason to accept the claim as true than its opposite, because the arguments for them are equally believable. Hence there is equipollent dispute and the skeptic then reacts by suspending belief.

1.3 Equipollent accounts

Sextus says that the accounts (*logoi*) of appearances are equipollent, or that appearances are equipollent insofar as their accounts are concerned (*Pyr.* 1.8, 10, 202–3, 227). These accounts spell out the different justifications and reasons for believing x to be F

as opposed to not-F. We can often suggest the reason why x appears F to one person but not-F to another. Different people may suffer the same thing differently, and the reason may be that they are in different states: "objects produce dissimilar impressions on us depending on our being in a natural or an unnatural state … The same water seems to be boiling when poured on to inflamed places, but to us to be lukewarm" (*Pyr.* 1.101). Sextus does not deny that we can articulate the reasons for the contrary appearances and give an account of them. On the contrary, he relies on an account of them and submits that we cannot prefer one account to the other in order to establish which appearance is true.

In some cases these reasons can be understood in terms of arguments, as in the tenth mode of Aenesidemus. Here Sextus compares different appearances that depend on "persuasions and customs and laws and beliefs in myth and dogmatic assumptions" (*Pyr.* 1.145), the last of which is explained as "an acceptance of a matter which seems to be supported by abduction or proof of some kind, for example, that there are atomic elements of things, or homoeomeries, or least parts, or something else" (*Pyr.* 1.147). It might appear to some that there are atoms, then, and it might do so because of an argument, and it might appear to others that atoms do not exist because of a different argument. Equipollence between the competing arguments for the existence or non-existence of atoms is created if the arguments for the claims are equally believable, so that the skeptic cannot prefer one to the other.

Usually, in his arguments against the claims of dogmatic philosophers, which occupy the special part of his works, Sextus confronts a dogmatic claim by arguing that the thing under discussion either does not exist or cannot be known. He may use his own arguments for this end, without being committed to them; they are used as dialectical ploys. He also frequently uses the modes of Agrippa; thus he argues for instance that one cannot know whether there is motion. In the end, though, he opposes the two claims, for and against there being motion, finds the arguments equally believable, and suspends belief because of this equipollence. The procedure is clearly set out in *Pyr.* 3.65. When schematized, the basic Pyrrhonist argument looks like this (I regard the difference between "x appears F" and "it appears that x is F" as of no consequence for the skeptic, since her appearance can be propositional):

(1) x appears F according to account A.
(2) x appears not-F according to account B.
(3) x cannot be both F and not-F.
(4) We cannot prefer account A to account B.
(5) We suspend belief as to whether x is F or not-F.

1.4. Appearances

As presented above, the equipollence caused by the impossibility of preferring account A to account B strikes someone who, while witnessing the conflict, is not necessarily party to the conflict. It makes her suspend belief nevertheless. Obviously the witness can be party to the conflict, however, and is often enough represented as such by Sextus. In fact, Sextus seems to suppose that, if one is to be psychologically affected in a way that makes one actually suspend belief, one is party to the dispute, that is, one is an investigating Pyrrhonist. Imagine the following case: x appears F to A ("to A" replacing "according to account A"), but not-F to B. Everything else is as before, but in this

scenario A takes the place of the third party even though she is party to the conflict. This is so because she is a Pyrrhonist. Now A suspends belief as to whether x is F or not-F.

When A started considering the issue, x appeared to her as F. We do not know whether she would have accepted it as true that x is F, or whether it tentatively seemed to her to be so, or in what sense it appeared to her. Moreover, she would have been able to give an account of her appearance. When confronted with the account for B's appearance, however, she is unable to prefer her own account to B's. Then she suspends belief. Nevertheless x may at the same time appear to A as F, whether in the same sense as before or in some different sense. She is stuck with the appearance that x is F, which is her appearance, as opposed to B's appearance. The Pyrrhonist argument can now be schematized like this:

(1) x appears F to A.
(2) x appears not-F to B.
(3) x cannot be both F and not-F.
(4) A cannot prefer her own account of x to that of B's.
(5) A suspends belief as to whether x is F or not-F.
(6) x appears F to A.

On the one hand, according to this schematization, the cause of the suspension of belief as to the truth of the appearance is the equal believability of the accounts of the appearances, and that is the sense in which the appearances themselves are equally believable. Apart from that, one appearance is obviously more compelling than another. The same goes for cases of non-perceptual appearances, or so Sextus suggests. It may appear to A that there is motion, although she finds the reasons for accepting that appearance no more believable than those for its contrary. One could also say that, insofar it is a matter of the accounts of the appearances, that is, which one she is to accept as true, she suspends belief. This seems to be what Sextus has in mind when he uses the phrase "insofar as it is a matter of the account" (*hoson epi tōi logōi*, on which, see Brunschwig 1990). So appearances are not equipollent in some other respect.

On the other hand the schematization draws out a perplexing and much discussed feature of the Pyrrhonist project. It shows that the Pyrrhonist may at the same time have the appearance that x is F (according to the relation that holds between her and the object of the appearance), and suspend belief as to whether x is really F or not (irrespective of the relation). This feature calls for an explanation of the appearance that A is stuck with. Consider this example:

(1) The wind appears warm to A.
(2) The wind appears cool to B.
(3) The wind cannot be both warm and cool.
(4) A cannot prefer her perception of the wind to B's.
(5) A suspends belief as to whether the wind is warm or cool.
(6) The wind appears warm to A.

According to (6), A is affected in a certain way: she finds the wind warm; it just happens that way, for whatever reason. The appearances mentioned in (1) and (2) could be such affections, or they could be beliefs based on perception. Sextus submits that

appearances need not be perceptual, however. They could be propositions, for example about there being providence. Sextus often uses this example, for instance in his introduction to the modes of Aenesidemus: "We oppose what is thought of to what is thought of when, against those who seek to establish that there is providence from the orderliness of the heavenly bodies, we oppose the view that often the good do badly while the bad do well and conclude from this that there is no providence" (*Pyr.* 1.32;). He then takes the same case as an example of a dogmatic supposition in the tenth mode (*Pyr.* 1.151, 155, cf. 222). He also mentions it in his special arguments against the dogmatists (*Pyr.* 2.5; 3.2, 5, 9–12, 219; *Math.* 7.434; 8.286). The skeptic, however, suspends belief about there being providence. Sextus nevertheless says that "following ordinary life without opinions, we say that there are gods and we are pious towards the gods and say that they are provident: it is against the rashness of the dogmatists that we make the following points" (*Pyr.* 3.2), namely arguments for and against that issue in suspension of belief. Consider then the following schematization:

(1) It appears to A that there is providence.
(2) It appears to B that there is no providence.
(3) It is impossible that there both is and is not providence.
(4) A cannot prefer his argument to B's argument as more believable.
(5) A suspends belief as to there being providence.
(6) It appears to A that there is providence.

In this case (6) is supposed to function like (6) in the previous example; it just appears to A that there is providence, and the premises may refer to the same sort of appearance or that A and B hold beliefs (tentative or not) about providence. In both examples the accounts given of the appearances, whether they explain perceptual relations or constitute arguments, are found equally believable. Indeed, Sextus can compare accounts of perceptual relations and arguments. One would suppose, then, that the appearance that A finds herself stuck with, whatever its provenance, is at the very least not based on believing the account, because the account is not found more believable than the account for the contrary appearance. What then is this appearance if it is not belief? There have been two major approaches to the question of the status of the skeptic's appearances.

In order to make sense of the persistence of x appearing F to A without A believing that x is F, a distinction has been utilized between two kinds of appearances, judgmental and phenomenological (Chisholm 1989: 26–30). Judgmental appearances are identical with (tentative) beliefs, while phenomenological appearances are non-judgmental impressions. Sextus may have the latter in mind when he claims that things just appear to the skeptic, because he emphasizes that the skeptic's appearances are unwilled and passive; appearance statements simply describe the skeptic's experience. To work for Sextus, phenomenological appearances have to cut across the distinction between perceptual and non-perceptual appearances (an extension not envisaged by Chisholm, who was concerned with perception). So, an argument, for instance about there being providence, just might phenomenologically appear to one as sound (Annas and Barnes 1985; Barnes 1982; Burnyeat 1980, 1984; Burnyeat 1980 finds the extension difficult to concede).

Another way is to leave aside the distinction between these two kinds of appearances and allow only judgmental ones, whether in perceptual or non-perceptual cases.

The argument for adopting this interpretation is that the distinction is alien to Sextus and (more importantly) conceptually flawed, especially in the case of non-perceptual appearances. Then the skeptic would indeed believe that x is F while suspending belief as to whether x is really F. His skeptical belief would at most be tentative and not based on the reasoning spelled out in the account of the appearance, however, at least insofar as that reasoning is philosophical (Frede 1979, 1984; Striker 1981; Barney 1992).

The debate shows how difficult it is to get to grips with Sextus' notion of appearance and his use of it. We should bear in mind that Sextus, in his exposition of the modes of Aenesidemus, does not hesitate to suggest explanations of why things appear to observers in different ways. He can be meticulous, as in his discussion of the first mode: "When we press one of our eyes from the side, the forms and shapes and sizes of the objects we see appear elongated and narrow. It is likely, then, that those animals (such as goats, cats and the like) which have slanting and elongated pupils, should view existing objects differently and not in the same way as animals with round pupils suppose them to be" (*Pyr.* 1.47). The causes of our appearance can be suggested in this way.

Further, Sextus sets down constraints in his explanation of the appearances of skeptics. (1) Appearances are involuntary affections that simply happen to us. Even suspension of belief, produced by the juxtaposition of competing accounts, is an involuntary affection (*Pyr.* 1.196); in fact every response of the skeptic is in this sense an involuntary affection. (2) Sextus suggests that in having appearances the skeptic is responsive to reason. The skeptic is not responsive to reason in the sense of finding one account more believable than another, however. Sextus suggests that the skeptic can indeed be persuaded of something, but that this state of being persuaded is an affection immune to persuasion, like being glad or grieving (*Math.* 8.473–75; cf. Striker 1981: 146). He tries to elucidate the sense in which the skeptic can be persuaded without believing: "It means not resisting but simply following without strong inclination or adherence (as a boy is said to go along with his tutor)" (*Pyr.* 1.230). Apparently, the causes of the skeptic's affections can be suggested by reference to his rational capacities, and in general to his physical and intellectual condition (cf. *Pyr.* 1.21–24). (3) As affections appearances are subject neutral. Notionally the skeptic can have any appearance.

How would Sextus then explain the skeptic's appearance that there is providence? There would be no problem if the cause of the appearance that there is providence were not a reasoned argument. Indeed, it might be suggested that the skeptic, according to Sextus, has this appearance because she has been conditioned from childhood to accept providence. Promising as that suggestion is, it is difficult to accept if the skeptic can at any time be causally affected by reasoned arguments. Further, when the skeptic suspends belief because of the equipollence of accounts, Sextus does not contrast reasoned arguments with perceptions, but rather what is said about the object (its account, whatever reasons it spells out) with the object's appearance.

The skeptic's suspension of belief has to do with whether x is really or by nature F. We could also say that she suspended belief as to whether x is F or not-F without regard for any of the relations that frame its appearances (viewed from nowhere, as it where). So, when she says that it appears to her that x is F, she means that x appears to her as F without her believing that it is F. On this reasoning, the reason for it appearing to the skeptic that there is providence may be (completely or partially) the fact that an argument affects her, who is disposed in a certain way, in that way. At the same time she cannot prefer the argument for that claim to the argument for the contrary claim

in point of believability. The arguments are equally believable. Clearly, it appearing to her that there is providence is supposed to be different from a dogmatist's belief that there is providence, because the dogmatist does prefer her own argument to those of her opponent in point of believability. That is precisely what makes her a dogmatist. So, the crucial difference between the skeptic's appearance that there is providence and the dogmatist's belief that there is providence is that the skeptic is unable to give more credence to the argument that may nevertheless affect her in this manner. Sextus would submit that there mere fact that the argument *compelled* the skeptic did not give it the required authority to forestall suspension of belief.

Can the skeptic simultaneously be compelled by reasoning to suspend belief as to x being F (or not-F), and be compelled by reasoning to have the appearance that x is F? That is what Sextus submits, on this account. For these two attitudes to be compatible there may be required a distinction between accounts as causes and accounts as reasons or rational justifications. We reach again an important point discussed above, when discussing suspension of belief as an affection as opposed to a rational inference. At all events, there are, so Sextus could submit, two kinds of the "view" that there is providence. The Pyrrhonist can have the one that is compatible with suspension of belief on the issue, but not the other.

We can formulate the above question differently. Imagine a skeptic to whom x appears F but who is engaged in pitting together new accounts both in favor of that appearance and against it. She suspends belief, having found the accounts equally believable. Could x *then* appear to her as not-F? If so, then the account against could have had the effect that the skeptic changed her mind. If not, she is stuck with the same appearance for the foreseeable future and the accounts have no weight in the formation of her appearance.

It has so far been assumed that appearances, however we should conceive of them, at least serve the same purpose for skeptics as do beliefs for others. Against this view, it has been claimed (not least on the basis of *Pyr.* 1.13 and 215) that conceiving of appearances in this way misrepresents the skeptical enterprise (Fine 2000; Perin 2010a). Appearances should be understood, not quite as replacements of dogmatic beliefs, but rather as the subject of skeptical beliefs; the skeptic has beliefs about her mental states, all her affections, including her appearances. It is difficult to see what this interpretation entails for our understanding of skeptical appearances, even as the subject of beliefs. On this account, however, Sextus would need to concede that, insofar as having beliefs amounts to judging something to be real, the skeptic would judge her affections to be real, which, according to Galen, at least some Pyrrhonists found too much (*On the Differences in Pulses* 8.711.1–3).

Sextus may also employ the notion of appearance to answer charges of self-refutation. Should not the skeptic (the objection goes), when she claims that x is no more F than not F, or utters any other skeptical phrase (discussed in *Pyr.* 1.14–15, 187–208), apply this expression to her own claim? Sextus may be interpreted as allowing that the skeptical expressions do apply to themselves in the sense of cancelling themselves, but only after having done their job, like drugs that having worked are washed out of the system (McPherran 1987). It may suffice for Sextus to appeal to the distinction between a skeptic, when expressing herself, as reporting an appearance, and a dogmatist as professing a belief; the latter would refute herself, but not the former (Castagnoli 2000).

The charge of self-refutation was one of two regularly made against skeptics. The other charged them with inconsistency through acting and deciding what to do.

2. Appearances and action

If the skeptics have no beliefs, their critics claim, they are unable to act. If they act, they have beliefs and are thus inconsistent. Further, even if they can consistently act without beliefs, by what means do they decide what to do? (On these so called inactivity arguments, see Striker 1980; Vogt 2010.) Sextus submits that the skeptic must have appearances in order to act, and she follows the appearances: "We say, then, that the standard of the skeptical persuasion is what is apparent, implicitly meaning by this the appearances; for they depend on passive and unwilled affection and are not objects of investigation … Thus, attending to what is apparent, we live in accordance with everyday observances, without holding opinions – for we are not able to be utterly inactive" (*Pyr.* 1.22–23).

Sextus explains, with due qualifications, how "everyday observances" determine the skeptic's appearances: (i) She can perceive and think, which enables her to have the various appearances she has, and presumably to offer the various contrary accounts of appearances. (ii) By necessity she follows her affections. Under this heading Sextus only mentions bodily affections like hunger and thirst – perhaps distinguishing these kinds of affections from affections in a wider sense that include all appearances. (iii) In accordance with the tradition of customs and laws it appears to her that being pious is good and being impious is bad. Piety seems to serve as an example of virtue in general. Sextus' suggestion is that virtue appears good to the skeptic (as indeed Sextus suggests elsewhere: *Pyr.* 1.17, cf. *Math.* 11.19–20), and the cause of this appearance is the tradition of laws and customs. Since this account is evidently not intended to explain which actions appear virtuous, but only that virtuous actions appear good, other appearances would provide the criterion of that. (iv) Through instruction she can be active within the kind of expertise that she adopts, whether mending her cart or healing her patient (on Pyrrhonism and medicine, see Allen 2010).

Appearances replace beliefs as sources of motivation. The fourfold standard of action in turn explains the way in which certain appearances win the agent over, so that she follows them and not others. It appeals to certain (apparent) facts about the agent: that she can feel, perceive, think and learn, and that she is affected by her environment and the way she is brought up.

Particularly in light of the third item in the fourfold criterion, critics have suggested (perhaps somewhat uncharitably) that Sextus leaves the skeptic with an impoverished life, a life of instinct and uncritical habit, in which her actions depend entirely on the way society has conditioned her (Bett 2010b). Consider Sextus' question concerning what the skeptic will do in a moral dilemma: "And if compelled by a tyrant to perform some forbidden act, he will choose one thing, perhaps, and avoid the other by the preconception which accords with his ancestral laws and customs" (*Math.* 11.166). This passage need not be taken to mean that the skeptic simply acquiesces in societal norms. Sextus says that the skeptic has preconceptions, which are not a matter of choice but depend on how and where she is brought up (on such preconceptions, see *Pyr.* 2.1–12, 246; cf. *Math.* 8.337–39). They would include the notion that virtue is good, as Sextus suggests. These preconceptions enable her to think and act, and even though she will suspend belief about what actually is the right thing to do, she will do what appears to her the right thing to do, whatever that might be, presumably what appears to her as good.

It was suggested above that the skeptic's appearances should not be construed as based on rational justifications for actions, but that they might involve causal effects of

reasoning. What effect could this distinction (such as it is) have on an appraisal of the skeptic's way of life? As before, we can ask whether the skeptic could have (and follow) one appearance at one time, and another at another time, in relevantly similar circumstances, that is, whether the skeptic could change her mind about what to do. Allowing reasoning as a causal factor in the formation of the skeptic's appearance may allow her to change her mind, without her decision being just whimsical, whereas otherwise she would seem to be a settled and predictable person, almost an automaton.

At all events, if we allow that the skeptic does not simply follow habit, although she would be affected by her preconceptions, and also that reasoning can causally affect her behavior, the difference between her and others depends on the significance of the difference between acting on beliefs and on appearances. Now everything depends on what is meant by 'appearance'. The skeptic acts in accordance not with what she believes is right but what appears to her as right. She could even suggest an account of why it so appears to her. She would not credit this account with revealing the truth, however, since she would be confronted with an account for the contrary, although it would still appear right to her.

Sextus does not discuss the consequences for the skeptic of following appearances. He does not suggest that living thus differentiates the skeptic from ordinary people, but he does report the consequences of suspending belief: the skeptic feels tranquil—and tranquility is supposed to differentiate the skeptic from others. Sextus suggests that the skeptic is not anxious about the truth of her appearances, while others (especially dogmatists) are anxious about the truth of their beliefs. Surprisingly enough, his explicit explanation of skeptical tranquility is not at all along those lines.

3. Action and tranquility

The Pyrrhonist suspends belief on the truth of any appearance, because she cannot grant the account for it more believability than the account against it. Having suspended belief, she finds herself tranquil. (On the notion of tranquility, see Striker 1990.) Sextus explains this tranquility in his chapter on the skeptic's aim (*telos*) in *Pyr.* 1.25–30. This is not a teleological explanation of human nature, but an elucidation of the future skeptic's aim. Sextus has already said that "the originating cause" of skepticism is the hope of becoming tranquil (*Pyr.* 1.12). Hoping for tranquility, the person suffered anxiety (*tarachē*, the absence of which is *ataraxia*). Sextus can be taken to envisage a person who, having started out holding some belief, is confronted with a conflicting belief. As a result the person grows anxious. The anxiety does not arise because of a specific subject matter, but is quite general. Call it epistemic anxiety. It is not the content of the belief that is supposed to release her of epistemic anxiety, but the calming certainty of the belief; the skeptic even studies natural philosophy for the sake of finding this epistemic tranquility (*Pyr.* 1.18).

The skeptic, however, finds no truth. Sextus tells us that the skeptic is still searching for truth (*Pyr.* 1.3). We have seen how her searches end in suspension of belief. Sextus explains what follows: "And when he suspended belief, tranquility in matters of belief attended fortuitously" (*Pyr.* 1.26). Apparently, the skeptic reaches epistemic tranquility, although not in the way she hoped, by finding out the truth, but by suspending belief.

What does it mean that the skeptic becomes tranquil when she suspends belief? The skeptic does not suspend belief once and for all. She suspends belief on individual issues, which are numerous. Even if she manages to suspend belief on all of them, she would

again have to weigh constantly new accounts for and against each issue. Skepticism is an ongoing activity. For the skeptic there cannot be a final and universal suspension of belief. Sextus seems to declare that the skeptic suspends belief once and for all when he says that she suspends belief on all things (for example *Pyr.* 1.31, 205), but what he means is that the suspension that leads to tranquility is topic-neutral. Nevertheless the relation between suspension of belief and tranquility remains unclear. Perhaps Sextus means that the skeptic is tranquil with regard to the issue on which she suspends belief. Then, however, the skeptic would gradually gain a series of bits of tranquility. If she were constantly searching and continually suspending belief, would she forever be becoming tranquil in a qualified way, or simply becoming ever more tranquil?

It is open to Sextus to clarify the matter in the following way. He has defined the skeptic as one who has the ability to set out oppositions on any issue, which results in an equipollence, which in turn produces the psychological reaction that she suspends belief on the issue in question. It is this general ability, and not the suspension of belief, which is specific, that characterizes the skeptic, for non-skeptics may suspend belief without possessing this ability. This ability (Sextus could say) is the source of epistemic tranquility. Whether or not Sextus could say this, however, he now does something completely different. He explains the tranquility that the skeptic experiences by claiming that it attends *only* suspension of belief within a certain domain, namely that involving good and bad. Explaining the skeptics' tranquility Sextus says:

> For those who hold the belief that things are good or bad by nature are perpetually anxious. When they lack what they believe to be good, they take themselves to be persecuted by natural evils and they pursue what (so they think) is good. And when they have acquired these things, they experience more troubles; for they are elated beyond reason and measure, and in fear of change they do anything so as not to lose what they believe to be good. But those who make no determination about what is good and bad by nature neither avoid nor pursue anything with intensity; and hence they are tranquil.
>
> (*Pyr.* 1.27)

If anyone believes that something is by nature good or that something is by nature bad, then they are anxious. Nothing is said or implied about other beliefs. The passage is offered as an explanation of what Sextus means by anxiety and tranquility. This tranquility is unlike the epistemic tranquility we expected. The explanation offered leaves the possibility open that one could gain tranquility by suspending belief only on the issue of natural values. It also leaves the possibility open that one could gain tranquility by actually believing that nothing is good or bad. One might suggest that on this account suspending belief on this issue is the most important part of gaining tranquility, or that the skeptic must suspend belief on other issues first in order to gain tranquility. Sextus does not offer such explanations.

The claim that the skeptic turns out tranquil is a report of what happens to the skeptic when she has suspended belief on the issue of natural values. As such it is not open to objection. Sextus offers more, however. He offers an account of anxiety that posits a causal connection between it and the holding of positive beliefs about natural values, so that holding such beliefs inevitably produces intense pursuit and avoidance, which in turn makes the agent anxious. It may indeed appear to Sextus the skeptic that these beliefs invariably cause anxiety (and the cause of that appearance may lie in some argu-

ment), and that sentiment may be intuitively appealing or not. It does little to unsettle his critics, however, and he represents it less as an appearance than as a generalized stipulation closer to dogmatic beliefs than skeptical appearances. Indeed, its origins seem to lie in his dialectical arguments against the ethicists (for the above account of skeptical tranquility, see Svavarsson 2011).

What we expected was an explanation of epistemic tranquility. Sextus does not explain epistemic tranquility, however. One would suppose that the removal of beliefs could be viewed as the removal of the sources of epistemic anxiety. That story could perhaps be told as a report of what happened to the skeptic: "his relation to his beliefs is permeated by the awareness that things are quite possibly different in reality, but this possibility no longer worries him" (Frede 1979: 23; Burnyeat 1980: 45 expresses a similar view).

Sextus' new explanation of skeptical tranquility may be taken to imply that for the skeptic it is the replacement of beliefs with appearances as sources of motivation that guarantees her tranquility. It supposedly does so by ridding the skeptic, when following her appearance, of the intensity or (immoderate) concern that characterizes others following their beliefs (Annas 1996). Acting on appearances without this concern may leave the skeptic somewhat uninvolved.

Sextus concedes that the skeptic cannot but be affected in all manner of ways (*Pyr.* 1.29). Although the clearest examples of affections are bodily ones like thirst, the notion of affection is often used by Sextus to offer a general explanation of the appearances the skeptic has, insofar as these are passive and unwilled. Sextus submits that the skeptic's tranquility is in fact qualified, for her tranquility is caused by not having beliefs, while her affections, insofar as these cannot be helped, still disturb her.

Positing tranquility as the aim of the skeptic may radically differentiate the skeptic from other philosophers (Striker 2001). Sextus states that the skeptic is an inquirer (the original meaning of *skeptikos*) in search of truth. Indeed, the skeptic does initially aim at finding the truth, in the hope of securing tranquility. Her defining capacity to create equipollent accounts of opposed appearances leads to suspension of belief and tranquility, however. Inasmuch as she is endowed with this capacity, she seems to be an inquirer in the sense of ceaselessly pitting accounts against accounts, but not in the sense of earnestly searching for the truth (but see Vogt 2011). Nevertheless, Sextus never commits himself to the claim that all accounts are equipollent. The skeptic just might come to hold a belief one day, and thus presumably cease to be a tranquil skeptic. This possibility does not upset her.

At all events the elevated status of tranquility in Pyrrhonist skepticism is no doubt due to the ideal of mental quietude going back to Pyrrho himself (Bett 2000; Svavarsson 2010). We also find evidence of this in Aenesidemus, who, even if primarily reacting against the mitigation of skepticism in the Academy, pointedly declares that "he who philosophizes according to Pyrrho is both happy in general and wise in knowing especially that nothing is firmly apprehended by him" (Phot. *Bibl.* 169b26–28).

References and Further Reading

Sources

The standard edition of Sextus Empiricus is in four volumes, edited by H. Mutschmann and J. Mau, with indices by K. Janáček (1914–62), Leipzig: Teubner. There is also a bilingual Loeb edition in four volumes

by R.G. Bury (1933–49), Cambridge, Mass.: Harvard University Press. Other translations include: J. Annas and J. Barnes (2000 [1994]) *Sextus Empiricus: Outlines of Scepticism*, Cambridge: Cambridge University Press (adopted above with minimal changes); B. Mates (1996) *The Skeptic's Way: Sextus Empiricus' Outlines of Pyrrhonism*, New York: Oxford University Press (with commentary); R. Bett (1997) *Sextus Empiricus: Against the Ethicists, Oxford: Clarendon Press (with commentary); R. Bett (2005) Sextus Empiricus: Against the Logicians*, Cambridge, Cambridge University Press; R. Bett (2012) *Sextus Empiricus: Against the Physicists*, Cambridge, Cambridge University Press; D. L. Blank (1998) *Sextus Empiricus: Against the Grammarians*, Oxford: Clarendon Press (with commentary). The relevant text of Photius' report of Aenesidemus is available in A. A. Long and D. N. Sedley (1987) *The Hellenistic Philosophers, 2 vols*., Cambridge: Cambridge University Press. The bibliography concerning Sextus Empiricus and related topics is considerable. That of Bett 2010: 314–45 is thorough.

References

Allen, J. (2010) "Pyrrhonism and Medicine," in Bett 2010: 232–48.

Annas, J. and J. Barnes (1985), *The Modes of Scepticism: Ancient Texts and Modern Interpretations*, Cambridge: Cambridge University Press.

Annas, J. (1996) "Scepticism, Old and New," in M. Frede and G. Striker (eds.) *Rationality in Greek Thought*, Oxford: Oxford University Press: 239–54.

Barnes, J. (1982) "The Beliefs of a Pyrrhonist," Proceedings of the Cambridge Philological Society 28: 1–29, reprinted in Burnyeat and Frede 1998: 58–91, and incorporated into J. Barnes (1990) "Pyrrhonism, Belief and Causation," in W. Haase (ed.) *Aufstieg und Niedergang der Römischen Welt* II.36.4, Berlin and New York: Gruyter: 2608–95.

Barnes, J. (1990) *The Toils of Scepticism*, Cambridge: Cambridge University Press.

Barney, R. (1992) "Impressions and Appearances," *Phronesis* 37: 283–313.

Bett, R. (2000) *Pyrrho, His Antecedents, and His Legacy*, Oxford: Oxford University Press.

Bett, R. (ed.) (2010) *The Cambridge Companion to Ancient Scepticism*, Cambridge: Cambridge University Press.

Bett, R. (2010a) "Scepticism and Ethics," in R. Bett (ed.) (2010): 181–94.

Brunschwig, J. (1990) "La formule hoson epi tôi logôi chez Sxtus Empiricus," in A.-J. Volke (ed.) *Le Scepticisme Antique, Cahier de la Revue de Théologie et de Philosophie* 15: 107–21, translated as "The formula hoson epi tôi logôi in Sextus Empiricus," in J. Brunschwig (1994) *Papers in Hellenistic Philosophy*, Cambridge: Cambridge University Press, 244–58.

Burnyeat, M. and M. Frede (eds.) (1998) *The Original Sceptics: A Controversy*, Indianapolis: Hackett.

Burnyeat, M. (1980) "Can the Sceptic Live His Scepticism?," in M. Schofield, M. Burnyeat, and J. Barnes (eds.) *Doubt and Dogmatism*, Oxford: Clarendon Press: 20–53, reprinted in M. Burnyeat and M. Frede (1998): 25–57.

Burnyeat, M. (1984) "The Sceptic in His Place and Time," in R. Rorty, J. B. Schneewind, and Q. Skinner (eds.) *Philosophy in History: Essays on the Historiography of Philosophy*, Cambridge: Cambridge University Press: 225–54, reprinted and expanded in M. Burnyeat and M. Frede (1998): 92–126.

Castagnoli, L. (2000) "Self-Bracketing Pyrrhonism", *Oxford Studies in Ancient Philosophy* 18: 263–328.

Chisholm, R. (1989[3] [1966]) *Theory of Knowledge*, Englewood Cliffs N. J.: Prentice Hall.

Fine, G. (2000) "Sceptical Dogmata: Outlines of Pyrrhonism I 13," *Methexis* 13: 81–105.

Frede, M. (1979) "Des Skeptikers Meinungen," *Neue Hefte für Philosophie* 15/16: 102–29, translated as "The Sceptic's Beliefs" in M. Frede (1989): 179–200, reprinted in M. Burnyeat and M. Frede (1998): 1–24.

Frede, M. (1984) "The Sceptic's Two Kinds of Assent and the Question of the Possibility of Knowledge," in R. Rorty, J. B. Schneewind, and Q. Skinner (eds.) *Philosophy in History: Essays on the Historiography of Philosophy*, Cambridge: Cambridge University Press: 255–78, reprinted in M. Frede (1989): 201–24, and in M. Burnyeat and Frede (1998): 127–51.

Frede, M. (1989) *Essays in Ancient Philosophy*, Minneapolis: University of Minnesota Press.

Hankinson, R. J. (2010) "Aenesidemus and the Rebirth of Pyrrhonism," in R. Bett (ed.) (2010): 205–19.

House, D. (1980) "The Life of Sextus Empiricus," *Classical Quarterly* 30: 227–38.

McPherran, M. (1987) "Sceptical Homeopathy and Self-Refutation," *Phronesis* 32: 290–328.

Perin, C. (2010a) "Scepticism and Belief," in R. Bett (ed.) (2010): 145–64.

Perin, C. (2010b) *The Demands of Reason: An Essay on Pyrrhonian Scepticism*, Oxford: Oxford University Press.

Schofield, M. (2007) "Aenesidemus: Pyrrhonist and 'Heraclitean'," in A. M. Ioppolo and D. N. Sedley (eds.) *Pyrrhonists, Patricians, Platonizers: Hellenistic Philosophy in the Period 155–86* BC, Naples: Bibliopolis, 271–338.
Striker, G. (1980) "Sceptical Strategies," in M. Schofield and J. Barnes (eds.) *Doubt and Dogmatism*, Oxford: Oxford University Press: 54–83, reprinted in G. Striker (1996): 92–115.
Striker, G. (1981) "Über den Unterschied zwischen den Pyrrhoneern und den Akademikern," *Phronesis* 26: 153–71. Translated as "On the Difference between the Pyrrhonists and the Academics," in G. Striker (1996): 135–49.
Striker, G. (1983) "The Ten Tropes of Aenesidemus," in M. Burnyeat (ed.) *The Skeptical Tradition*, Berkeley and Los Angeles: University of California Press: 95–115, reprinted in G. Striker (1996): 116–34.
Striker, G. (1990) "Ataraxia: Happiness as Tranquillity," *Monist* 73: 97–110, reprinted in G. Striker (1996): 183–95.
Striker, G. (1996) *Essays on Hellenistic Epistemology and Ethics*, Cambridge: Cambridge University Press.
Striker, G. (2001) "Scepticism as a Kind of Philosophy," *Archiv für Geschichte der Philosophie* 83: 113–29.
Svavarsson, S. H. (2010) "Pyrrho and Early Pyrrhonism," in R. Bett (ed.) (2010): 36–57.
Svavarsson, S. H. (2011) "Two Kinds of Tranquility: Sextus Empiricus on Ataraxia," in D. Machuca (ed.), *Pyrrhonism in Ancient, Modern, and Contemporary Philosophy*, Dordrecht: Springer: 19–31.
Vogt, K. (2010) "Scepticism and Action," in R. Bett (ed.) (2010): 165–80.
Vogt, K. (2011), "The Aims of Skeptical Investigation," in D. Machuca (ed.) *Pyrrhonism in Ancient, Modern, and Contemporary Philosophy*, Dordrecht: Springer: 33–49.
Woodruff, P. (2010) "The Pyrrhonian Modes," in R. Bett (ed.) (2010): 208–31.

Related chapters

34. The Hellenistic Academy
35. Early Pyrrhonism: Pyrrho to Aenesidemus

42
PLOTINUS

Christoph Horn

Introduction

Plotinus (204/5–270 AD) regarded himself as a mere interpreter of Plato's thought. As we know from one of the rare self-reflective passages in his writings (*Enn.* V.1 [10] 8), he traced the core of his metaphysical doctrines to Plato. Modern scholarship, however, emphasizes the differences between him and Plato, as well as the influence of other philosophers to whom he is indebted. Among those are especially Aristotle, the Stoics, Alexander of Aphrodisias, and some of the so-called Middle-Platonists. But Plotinus was not only an heir of many important ancient thinkers; he also seems to have introduced into the history of Platonism some remarkable ideas of his own. Therefore, starting with the late eighteenth century, scholars have classified his philosophical position by the term "Neo-Platonism." Plotinus is generally seen as the founder of this tradition. Neo-Platonism became the predominant philosophical school in latest ancient thought; its most prominent adherents were Porphyry, Iamblichus, Dexippus, Syrianus, Proclus, Damascius, Simplicius, and John Philoponus.

Most, if not all, versions of Platonism accept the dichotomy between a "higher" world of intelligible entities and our "lower" world of sensible things. The same holds true for the famous theory of Forms which is commonly seen as the basis of any sort of Platonism. But the ingredient which is significant for Neo-Platonism is the doctrine of three principal hypostases, the One (*hen*), the Intellect (*nous*), and Soul (*psuchē*). All of these three entities belong to the intelligible realm; in relation to one another, they are ordered hierarchically whereby the One generates the Intellect, and the Intellect causes the Soul. Perhaps the most specific feature of Plotinus' metaphysics consists in the claim that the One is strictly transcendent and ineffable. This theory is sometimes called "henology." Plotinus uses his henology in order to formulate an uncompromising metaphysical monism: by constituting the Intellect, the One operates as the (indirect) source and origin of all further entities, including the material world and even matter (*hulē*) as its ultimate product. Plotinus thus avoids the need to introduce a second principle. Consequently, he has to explain the multiplicity and sub-optimality of lower entities as a result of a gradual process of derivation, beginning with the One and ending with matter.

Life and works

The only source for Plotinus' biography is the *Vita Plotini* (*VP*) written by his student Porphyry (see Brisson et al. (eds.) 1992). The *VP* draws a hagiographic picture of Plotinus as an ideal philosopher: a person of superior intellect and of sincere personal integrity. We are told that he was both a fascinating teacher and some sort of religious

thaumaturge. Nevertheless, the *VP* does also contain a great deal of reliable historical information. We read that Plotinus studied philosophy in Alexandria in Egypt during the years 231–242. His own teacher was Ammonius Sakkas who remains a somewhat mysterious figure; we know virtually nothing about Ammonius since he taught orally and left no writings. Porphyry tells us that his three students Plotinus, Herennius, and Origenes (not to be confused with the church-father of the same name) agreed to remain silent on their master's teachings; but in later years Plotinus did not feel the need to keep this promise because his two colleagues breached the agreement first (*VP* 3.25–35). Nevertheless, it is far from clear to what extent Plotinus' writings contain the doctrines of Ammonius. In 242 AD, Plotinus participated in a military expedition to Persia undertaken by the Roman emperor Gordian III; we are told that Plotinus thereby wanted to get into contact with the philosophies of the Persians and Indians. But the campaign failed and Plotinus had to flee to Antioch (*VP* 3.15–24).

We do not know why Plotinus, around 244/5, chose Rome as the place for the foundation of his philosophical school. But it cannot be taken for certain that he was born in Lycopolis (Egypt) as many scholars believe; Plotinus refused to comment on his origin and his youth. Instead, the name Plotinus might be traced back to the Latin "Plautinus" which could be related to the aristocratic Roman family of the *Plautii*. At any rate, it is probable that Plotinus stems from a noble Roman background since he was in close contact with the imperial court, particularly during the reign of the emperor Gallienus (253–68). Most of Plotinus' students belonged to highly privileged circles in Rome. So it is not surprising to read that Plotinus even tried to realize, in the Italian region of Campania, a political community named "Platonopolis" which was meant to follow the rules laid down in Plato's *Republic*. But after the death of Gallienus, Plotinus' influence diminished considerably; he retired to a manor of one of his students in Minturnae (Campania) and died there in 270.

According to the *VP*, we possess all the treatises written by Plotinus in the period from 254 until his death. Porphyry diligently enumerates their first words, their titles (formulated by himself) and tells us both their chronological order and the order which he imposed on them in his *Ennead* edition. We hear that occasionally Porphyry split up thematically diversified writings in order to get exactly 54 treatises, that is, six *Enneads* (groups of nine treatises). The *Ennead* edition (accomplished in 301, 31 years after Plotinus' death) is based on the idea of presenting Plotinian thought in a systematic form: while *Enneads* I–III contain Plotinus' doctrines on matter and the sensible world, *Ennead* IV is the group of treatises concerned with questions of the Soul, *Ennead* V is dedicated to philosophical problems regarding the Intellect, and *Ennead* VI discusses questions regarding intelligible categories, numbers and the One. For modern readers, the main difficulty with Plotinus lies in the density and opacity of his treatises. He did not intend to publish these texts, but may have written them for internal use at school only. Many passages are formulated in a highly dialectical manner (containing material discussed at his school or taken from other philosophers). For this reason, in modern Plotinian scholarship, commentaries closely following the text and reconstructing particular arguments are at least as important as monographs and articles.

First principles

According to Plotinus, there exist three basic principles of reality: the One, the Intellect, and the Soul. The acceptance of his doctrine, he maintains, provides us with suf-

ficient explanations for every intelligible and sensible entity in the universe, since the principles are the causes of all beings. Plotinus conceives these three as vertically subordinated: the One is superior to the Intellect, and the Intellect is above the Soul. He explicitly claims that he is following Plato's *Parmenides* where the three "natures" are described as three versions of unity:

> But Parmenides in Plato speaks more accurately [sc. than the historical Parmenides] and distinguishes from each other the first One, which is more properly called the One, and the second which he calls "One–Many" and the third "One and Many." In this way, he agrees with the doctrine of three natures.
> (*Enn.* V.1 [10] 8.21–4; translations of Plotinus are taken from A.H. Armstrong)

In Plotinus' reading, Plato has given us in the *Parmenides* (137c–142a, 144e5, and 155e5) the key to a full understanding of reality, that is, the distinction between the first One strictly speaking (*to prōton hen, to kuriōteron hen*), the second One which is "One–Many" (*hen polla*) and the third One, the "One and Many" (*hen kai polla*). Before Plotinus, Numenius had already proposed a doctrine of three principles, but in contrast to Plotinus' three principles, these are qualifications of the Intellect. For Numenius, the first God is simple, indivisible, and resting; the second and the third God constitute a unity: the demiurge who is in motion, shapes the matter and, by doing so, is himself divided (Des Places: frs. 11, 12, 16, and 19).

Given the Plotinian concept of the One as an absolutely simple and unified entity, it is obviously difficult, if not impossible, to describe it more closely. Plotinus characterizes it as transcendent to all being(s), often using Plato's formula "beyond being" (*epekeina tēs ousias*) from *Republic* 6 (509b9). He calls this principle "One," "the Good," "the First," sometimes also "father" or "god." In the *Enneads*, we find many texts discussing the difficulty of how to appropriately speak of such an entity. Plotinus characterizes it very cautiously in order not to ascribe any plurality to it. It or "he," as Plotinus occasionally says, has no attribute in common with the entities derived from it, and so, by constituting them, "gives what it does not possess" (V.3 [49] 15.1–7). Plotinus has a deliberate form of "negative theology," that is, a philosophy of language which deals with the question of how to express the absolute by means of this-worldly language. The One can be characterized neither by predication nor by simple designation nor by direct description. Even expressions such as "the One," "the Good" etc. are strictly speaking inadequate. (Cf. VI.9 [9] 5.30–33; V.5 [32] 6.26–37; II.9 [33] 1.1–8; VI.8 [39] 8.6–7. For discussion: Mortley 1986.) The One cannot even be called "something" (*ti*: V.5 [32] 6, 23; cf. V.3 [49] 11, 35–42), it cannot be described by "in this way" (*houtō*: VI.8 [39] 9, 38–46); it is wrong even to add the definite article "*to*" to it (VI.7 [38] 38.1–9; cf. VI.9 [9] 11.35–42). In a sense, we are told, it can be described as "the nothing" (III.8 [30] 10.26–31). The reason for these difficulties is not that Plotinus harbors general doubts as to whether reality can be represented by linguistic means. In fact, he supports a simple form of reference theory of language whereby the meaning of an (external) object is adequately designated by the expression referring to it. But the One (and also, to a certain degree, matter) escapes our linguistic instruments. Plotinus accepts only indirect uses of language: metaphor, paradox, analogy, hyperbole, and apophatic speech.

One impressive example for Plotinus' indirect method of description is in VI.8 [39]. There, he wants to make plausible why we can ascribe freedom of will to the One. His general strategy consists in claiming that something which constitutes other free,

rational, and willing entities cannot itself be unfree, irrational, and unwilling (VI.8 [39] 12.17–20). Generally speaking, a positive feature which applies to something caused must be ascribable to its cause. This is why Plotinus attributes to his first principle also a form of thinking or, more precisely, "something higher than thinking" (*hupernoēsis*: VI.8 [39] 16.32). Then he contends that the One is free in the sense of being higher than freedom. For if it causes all things by deliberate decision, it must be constituted by a self-related deliberate act of will (VI.8 [39] 16.21–4): "He [sc. the One] […] makes himself and is not as he chanced to be but as he wills, and his willing is not random nor as it happened; for since it is willing at the best it is not random." Given that the One is neither similar to the entities it produces nor even related to them, there cannot be a sufficiently lucid explanation of how all entities derive from it but only, at best, some sort of circumscription. Plotinus' approach to this is based on the Aristotelian dichotomy of *dunamis* and *energeia*. (The importance of Aristotle's metaphysics for Plotinus' teaching is emphasized by Porphyry in *VP* 14.5–7.) For Plotinus, every intelligible entity is affluent in the sense that it possesses the power to cause some minor entity. In contrast to Aristotle's use of the dichotomy, this productive power is called *dunamis*. The impact of the *dunamis* is called *energeia* which, in this way of speaking, means neither "activity" nor "actuality," but rather "effect." Plotinus distinguishes between an inner and an outer *energeia*, the first meaning the effect of the productive power within the entity (like the light which is inherent in a fire) and the effect caused by it outside (like the light spread around the fire). See IV.5 [29] 7.13–20. Cf. II.9 [33] 8.18–26.

It is likely that Plotinus is highly innovative in his theory of the transcendent One. But his position is much less original with regard to his concept of Intellect (*nous*). Here he accepts and combines elements of different traditional theories, especially the Peripatetic theory of the Intellect advanced by Alexander of Aphrodisias. Alexander brings together the Aristotelian account of *nous* as self-thinking Prime Mover from *Metaphysics* Lambda with the distinction of an active and passive intellect according to *De anima* 3.4–5. Furthermore, Plotinus identifies his Intellect with the demiurge as described in Plato's *Timaeus*. He follows the solution already found in Middle-Platonism that the demiurge contains all the Forms. The Intellect is hence conceived as composed by Forms which are paradigms of all entities, features and facts to be found in the "lower" world, and it is seen as self-thinking since the Forms are self-reflective (see Beierwaltes 1991 and Kühn 2009). At the same time, Plotinus describes the Intellect as a unity not far away from the non-multiple unity of the One; he characterizes it by the Anaxagorean formula *homou panta* which means "everything (is) together." Its unity is that of a close interdependence of related items like that of different elements in a science; in geometry, for example, all true theorems are immediately interrelated in the sense that the whole science implies every single theorem, but also every single theorem the whole science and every other theorem (IV.9 [8] 5.8–25).

The Plotinian Soul can be taken as a cosmic entity derived from Intellect and producing the sensible cosmos. It has the function of signifying the transitional point between the intelligible and the sensible part of reality. Cosmic Soul comprehends the world-soul and all individual souls. Furthermore, it is the source of motion because of its self-motion, and the source of time (*chronos*) since it imitates, by its way of life, eternity (*aiōn*) which is the mode of life adopted by the Intellect. One important additional feature of Soul is that its internal thinking is not immediate and intuitive (as in the case of Intellect), but inferential and discursive.

Matter, evil, and sensible reality

According to Plotinus, matter (*hulē*) is derived from the intelligible world. He does not conceive of it as some sort of second principle co-eternal with the absolute One. Instead, matter is the ultimate product of the top-down procession which is so crucial for Plotinian metaphysics. Being the lowest entity in the universe, matter is deprived of any positive qualities. Plotinus therefore characterizes it as something "non-existent":

> Non-being here does not mean absolute non-being but only something other than being; not non-being in the same way as the movement and rest which affect being, but like an image of being or something still more non-existent. The whole world of sense is non-existent in this way, and also all sense-experience and whatever is posterior or incidental to this, or its principle […].
>
> (I.8 [51] 3.7–12)

Non-being in the case of matter means neither absolute non-existence nor the type of non-being which Plato ascribed to movement and rest in his *Sophist* (namely being different from being). What Plotinus in fact has in mind is non-existence in the sense of being a mere image of real being. As he points out, the sensible world as a whole must be seen as non-existent in this sense. In this context, he claims that matter operates so to speak as the principle of this non-existence. In the passage immediately following the quoted one, we are told that matter is without qualities, formless, completely deprived, and evil; furthermore it is described as being the essential evil, in that it deprives and makes evil all the things which come in touch with it:

> At this point one might be able to arrive at some conception of evil as a kind of unmeasuredness in relation to measure, and unboundedness in relation to limit, and formlessness in relation to formative principle, and perpetual neediness in relation to what is self-sufficient; always undefined, nowhere stable, subject to every sort of influence, insatiate, complete poverty; and all this is not accidental to it but in a sort of way its essence; whatever part of it you see, it is all this; and everything which participates in it and is made like it becomes evil, though not essential evil.
>
> (I.8 [51] 3.12–20)

In this impressive text, matter is characterized as unmeasuredness (*ametrian*), unboundedness (*apeiron*), formlessness (*aneideon*), and perpetual neediness (*aei endees*); it is "always undefined" (*aei aoriston*), "nowhere stable" (*oudamē hestōs*), "subject to every sort of influence" (*pampathes*), "insatiate" (*akorēton*), and "complete poverty" (*penia panteles*). We can see that matter is not only pure potentiality in the Aristotelian sense, but also pure deprivation. Whereas matter is the essential evil, all the entities which show deprivations receive these from it. (It should, however, be noted that, for Plotinus, there also exists an "intelligible matter" which is free from all negative aspect and which is not mere potentiality. Cf. II.4 [12].) What Plotinus has in mind are defects of material things such as damages, diseases and ugliness of organic bodies, or moral shortcomings of human souls:

> We maintain that the things in this world are beautiful by participating in form; for every shapeless thing which is naturally capable of receiving shape

> and form is ugly and outside the divine formative power as long as it has no share in formative power and form. This is absolute ugliness. But a thing is also ugly when it is not completely dominated by shape and formative power, since its matter has not submitted to be completely shaped according to the form.
>
> (I.6 [1] 2.14–8)

We should take care not to mistake the *metaphysical evil* of matter (to put it in Leibnizian terms) for the *moral evil* in the soul of an individual (Cf. I.8 [51] 14.44–51 and III.2 [47] 4.36–44). Although matter is evil *per se*, it is morally indifferent. It is the human soul, however, that when it turns to matter thereby assumes a morally deprived identity (O'Brien 1991).

Plotinus proposes that evil is a privation of good. The One (or God) does nothing but spread its goodness in the process of derivation; it generates only good things, and hence it cannot be the cause of something purely negative. But since the process of derivation (or creation) cannot move on infinitely, we have to accept that it arrives at a final point. This lowest product of the process is hence "evil" in the sense that is shows the largest distance and difference from the One. But it is neither bad in the moral sense nor evil in the sense of being an antagonistic second principle independent from the One, let alone in the sense of being dysfunctional within the world order. On the contrary, it plays a positive role in the Plotinian universe and is therefore good in the sense of being an integral part of a well-structured universe. Against the contemporary Gnostics, Plotinus defends the view that the entire cosmos is as good as it possibly can be (III.2 [47] 1.5–10). The main difference between the Plotinian and the Christian version of *privatio* is that Christian authors usually reject the idea that matter is the evil *per se*.

Following the Aristotelian paradigm, Plotinian matter also receives form. Matter serves as the substratum (*hupokeimenon*) underlying the form. But Plotinus does not share the Aristotelian view of hylomorphism according to which form and matter can exist only connected with each other. For him, forms exist independently from these compounds. Moreover, form and matter do not even constitute a real compound. Instead, Plotinus emphasizes the diversity of the apparent constituents and points out that they remain distant and separated even if they seem to form a hylomorphic unit. Especially in treatise III.6 [26], he claims that there exist no real form–matter hybrids since matter is unaffected and unaffectable. He defends the thesis that sensible substance is "a conglomeration of qualities and matter" (VI.3 [44] 8.20–1).

Plotinus maintains the Platonist conviction that organic bodies in the sensible world are alive since they possess a soul existing separately from matter. (He even believes that in every human soul, there exists a part which "is not descended" and hence permanently lives in the intelligible world.) Plotinus basically describes life as a unifying force which organizes the self-preservation, self-organization, and self-motion of the ensouled body. Living creatures use mechanisms and strategies that retain and save them. In the case of human bodies and animal bodies, the continuity, he claims, cannot be brought about without external help, that of a "caring" soul, while celestial bodies—which are, as we saw, living creatures, too—preserve themselves. It is obvious that the distinction Plotinus has in mind must be that between entities immediately organized by souls and entities indirectly formed by *logoi* which are derived from souls. The organizing factors that are keeping together sublunary entities are lower forms (*logoi*) originated by individual souls (cf. III.2 [47] 2 and Fattal 1998). Their presence is not necessary in celestial beings since they have forms of their own. Additionally, Plotinus ascribes an important

role to mass (*onkos*), which must not be identified with matter. Mass is an intelligible form of its own playing a genuine part in giving three-dimensionality and stability to an organism. (For the function of mass in Plotinus see Brisson 2000.) In both II.4 [12] 11 and IV.4 [28] 28.34–5 he claims that it is mass or "the more corporeal" which stabilizes the living body.

Plotinus considers the soul to be the ordering and organizing force (*to taxon*) of the body and the cause of the psycho–physical compound (IV.7 [2] 2.22). Soul thus remains different from the body even when it is connected with it. Hence he describes the theoretical antagonism between Aristotelian hylomorphism and his own dualism in terms of interdependence or separateness of form and matter respectively. In his criticism of Aristotle's concept of *entelecheia* in IV.7 [2], Plotinus raises the objection that, if soul as form and body as matter were interdependent in the Aristotelian sense, it could not be true that the organizing force of a living being is contained only in a part of this being. The whole of the creature under consideration would then have to be identical with its organizing force. But this is clearly not the case. To support this claim, he gives in IV.7 [2] 2 the remarkable example of plants whose organizing faculty lies solely in their roots. This force, he says, is situated only there and has some regenerative potential given that other parts of the plant dry up and die (IV 7 [2] 85.26–35). As this example shows, Plotinus sees soul as a transcendent guiding principle of living beings, not as an immanent form; if the guidance came from an immanent form, it would remain unclear why only a part of the plant contains complete vital force. In V.2 [11] 2.13–7, Plotinus develops an argument quite similar to that of IV.7 [2] 2: soul can partly retire from a plant when, for example, someone cuts off "the side-shoots or the tops of its branches." As this is intended to show, the vital force is contained only in a part of the organism. (Cf. III.8 [30] 10.10–9.) Additionally, Plotinus adopts the Platonic view—developed in the *Phaedrus*, the *Statesman*, the *Timaeus* and the *Laws*—that soul is something self-moved. Soul is the source of external motion, and in this sense self-moved, whereas the One is unmoved and Intellect is internally moved. By its self-motion, soul animates the bodies of living beings (III 4 [15] 1.). In IV 7 [2], we also find a passage where Plotinus introduces an interesting distinction: that between "living in virtue of itself" and "disposing of life (as a gift) which has been added (by something other)." The entity that is in immediate possession of life is, according to this passage, soul (*psuchē*). Whereas the cosmic soul is characterized by having life in an original sense, all the other living beings are said to have life in an indirect manner, namely by being ensouled. This assertion, however, causes a considerable problem with what we commonly think to be Plotinus' theory of life: we know from many later passages that "pure life" or "real life" is situated in the Intellect (*nous*). (See for example V.4 [7] 2.44–5, VI.9 [9] 2.24–5, III.8 [30] 8.12–24, VI.6 [34] 18.12–9, and VI.2 [43] 6.)

Aesthetics

In his treatise on beauty, I.6 [1], Plotinus rejects the view that beauty is symmetry. At first glance, this is surprising since rejecting symmetry seems to imply a general refusal of any Platonic mathematical idea of beauty. But Plotinus' objections are clearly Platonist arguments. The position refuted by him must be an anti-Platonic one and can perhaps be identified as Stoic (see Vassallo 2009: 20–44).

His arguments are: [a] If beauty were symmetry, then there could not exist anything which is both beautiful and simple. But there are examples which combine both

characteristics: color, light, gold, the night, or fire (I.6 [1] 1). One might suspect that it is incorrect to say that, for example, gold is simple in the sense of being non-composed. What Plotinus seems to have in mind is not a physical feature, but a phenomenal quality: gold might be called beautiful even in the state of raw material, but this judgment cannot be based on the symmetrical proportions of a formed piece of gold. [b] If beauty were symmetry, then beautiful things would have to be composed of ugly elements (I.6 [1] 1.27–31). This seems to be an abbreviated regress argument which might be rendered as follows: For beauty to be symmetry, a beautiful entity must consist of parts. But are the parts themselves beautiful? If beautiful things must be composed of beautiful parts, then the adversary must explain what sort of symmetry is at work here; finally he would blunder into an infinite regress. If something beautiful must be composed of the non-beautiful, that is, ugly parts, this is objectionable since parts can be beautiful too. We might object that by taking "non-beautiful" as "ugly" Plotinus confuses what is contradictory with what is merely contrary. But according to his gradualist account of ontology, this is not a mistake: what is less beautiful can be described as relatively ugly. What Plotinus wants to point out is that, according to the symmetry thesis, there is an implausible switch between the non-beautiful parts of an entity and its beautiful whole. [c] If beauty were symmetry, then we would be unable to describe human attitudes, behavior, virtue and knowledge as beautiful (I.6 [1] 1). If it makes sense at all to ascribe symmetry to the phenomena of human agency, Plotinus continues, this can be understood only in the sense of "consistency." But we are confronted with some sort of consistency even in cases of immoral behavior which can perfectly fit together. Immoral behavior, however, is far from beautiful. This third argument is not an aesthetic one; it is clearly based on a non-aesthetic semantic aspect of the highly equivocal expression "*to kalon*," namely "what is moral" or "fine."

In a later text, VI.7 [38] 22, Plotinus adds a fourth objection: [d] If beauty were symmetry, then we could not explain why the beauty of living creatures is much more attractive to us than that of inanimate images. We usually prefer the organic beauty of a living human to an artistic reproduction of him. According to Plotinus, the reason is that the Form which is the cause of the beauty of the person is immediately present in the case of the animate organism, whereas the same Form is only indirectly rendered in a picture or sculpture. The symmetry thesis cannot account for this difference in our evaluation.

To be sure, the main intention of Plotinus' aesthetics is not to reject certain adversaries; he is not fundamentally opposed to the idea that beauty has to do with sensible order and harmony. By raising objections against the symmetry thesis, Plotinus wants to point out that symmetrical order in the sensible world is not the cause, but a consequence of the presence of beauty. Beauty originates in the (more or less direct) presence of a Platonic Form. So the majority of his relevant observations are dedicated to this positive task: he wants to show that beauty is not an accidental attribute. With regard to intelligible beauty he explicitly claims that it is not situated at the surface, but "comes from profundity" (*kallos ek bathous*: V.8 [31] 10.30).

To make this plausible, Plotinus pays attention both to artistic and to natural beauty. As he describes the pertinent phenomena, one fundamental feature of all sensible beauty is that it persists only fleetingly. He concludes that this must be due to a partial and temporary participation in the Form of the beauty. By contrast, the beauty of intelligible entities is complete and eternal. According to his anti-materialist account of ontology, beauty cannot be an attribute which really inheres in a sensible object, and according to

his anti-sensualist theory of perception, it is impossible to regard beauty as some sort of sense-datum received for example by our sight or our hearing. The external beauty of a sensible object can be grasped only by an internal beauty in the recipient who possesses it as an "inner form" (*to endon eidos*: I.6 [1] 3.9). Beauty hence means the "appearance of the indivisible in the multitude." For Plotinus, the forms according to which an artist creates his works are "taken from the art within the soul of the artist" (V.9 [5] 3.31–3).

Plotinus consequently refutes an aesthetic theory according to which the work of art merely emulates external reality. For him, the artist has access to the higher world of forming principles (*logoi*): "Then he [that is, an imaginary dispraiser of art] must know that the arts do not simply imitate what they see, but the run back up to the forming principles from which nature derives" (V.8 [31] 1.35–7). This is why works of art can render the intelligible world: "For Pheidias too did not make his Zeus from any model perceived by the senses, but understood what Zeus would look like if we wanted to make himself visible" (V.8 [31] 1.38–41).

The example of Zeus is a much debated one since Plotinus seems to reject Plato's criticism of art in *Republic* 10. Two aspects are somewhat peculiar: First, Plotinus probably does not intend to say that *every* work of art can be traced back to an intelligible form, but only brilliant or authentic ones. It might be an interesting extrapolation from this idea to distinguish between better and worse works of art based on the criterion of the intelligible background present or absent in a given token. Second, he does not seem to provide an example of what he argues for in V.8 [31] 1, namely for pieces of art rendering natural things; Zeus is not an entity which appears in the sensible world, and so Pheidias' statue does not refer to a forming *logos* present in the world-soul. What Plotinus may have wanted to express becomes clearer from a parallel text: IV.3 [27] 11. There, he claims that, in ancient times, sacred works of art have been produced in order to attract the world-soul to places where there exists a certain sympathetic atmosphere, even if only a modest imitation of it (IV.3 [27] 11.1–10). The world-soul is present in sacred works of art since these are imitating Nature, just as a mirror reflects traits of the person reflected, and since soul is attendant wherever such an imitation occurs. Hence, by contrast with a work imitating an individual, say the sculpture of a horse, a temple emulates the entire world-soul (perhaps due to its elegance or perfect harmony rendering nothing specific). Sacred art is the crucial paradigm for art according to the Plotinian view. Given that beauty is a phenomenon having its fundaments in Platonic Forms, it is not surprising that our sense of beauty is capable of turning us from the sensible world to the intelligible. In this respect, he is following Plato's *Symposium* in claiming that there is, besides the dialectical strategy, a genuine aesthetic way of approaching higher reality: that of the *mousikos* and the *erōtikos* (I.3 [20] 1).

Ethics

Plotinus proposes a form of eudaimonism. In his ethical treatise I.4 [46] and in several other passages, we find him raising questions such as: What is constitutive for a flourishing life (*eudaimonia*)? Which sort of life should a human being choose? He responds that the best life for humans consists in being entirely directed to and connected with the intelligible world. Plotinus recommends us "to become as godlike as we possibly can," according to the Platonic formula (cf. *Theaetetus* 176a–b; see for example I.2 [19] 3.6–7), and this can be accomplished by leaving our earthly life behind. Plotinian ethics is also perfectionist in the sense that we should improve our intellectual abilities and

abstain from this-worldly entanglements in order to find the way back to our transcendent homeland.

It is helpful to distinguish between three different objections [a–c] against Plotinus' "soteriological egocentrism." [a] *Objection from self-immunisation*: In the *Enneads*, we find a high estimation of a normative figure, the sage (*spoudaios*), who is more or less immune to benevolent emotions and feelings of compassion. He is characterized by a complete detachedness from the evil of others. [b] *Objection from escapism*: Plotinus famously claims that the wise man should leave the world behind; one should "flee from here" (I.2 [19] 1.3). This strategy of withdrawal from the world seems to have disastrous consequences for moral duties and political obligations. [c] *Objection from the negligence of morally relevant goods*: Plotinus seems not to accept the value of genuine goods such as life, health, possession, or social recognition, and thus he seems to have no theoretical fundament on which a moral philosophy can be based at all.

[a] Following the Stoic ideal of *apatheia*, Plotinus has a general tendency to reject compassion and to recommend detachedness. He tells us that the death of our closest friends and relatives does not affect our happiness if we are sages (I.4 [46] 4); even the loss of a child and of all my possession need not endanger my state of mind (I.4 [46] 7). In ch. 8 of the treatise on *eudaimonia* we learn that the wise man is not strongly affected even by hard pain since no experience from the outer world can cut through to his inner self. That is also the reason why he is not deeply impressed by the suffering of others. As Plotinus explicitly says, compassion would be "a weakness of our soul" (I.4 [46] 8.13–4).

[b] As he famously claims, the best thing we can do is an "escape of a solitary to a solitary" (VI.9 [9] 11.51). On the other hand, in a brief reflection on friendship, in I.4 [46] 15.21–5, Plotinus claims that the sage is a friend to a higher degree than ordinary people. But this seems to hold true only for the sage's closest contacts. Both the reports from Porphyry and Plotinus' own remarks on friendship show that Plotinus makes no attempt to include a more extensive group of people in the sphere of moral responsibility, let alone to prompt an idea of moral universalism. We find no traces either of a universalism which connects all human beings, nor even a Stoic universalism of all wise men or the idea of a world state.

Before turning to [c], one might try to give a response to the first two objections. To begin with, in I.4 [46] 11.13 we are told that the *spoudaios* wishes all human beings to fare well. Furthermore, one might recall the fact that Porphyry informs us about the friendliness (*praotēs*) of his master towards the men, women, and children of his social context (*VP* 7–8; see for example Schniewind 2003). One should additionally remember the fact that Plotinus intended the foundation of "Platonopolis," an optimally organized political institution (see O'Meara 2003). But admittedly, he does not emphasize this-worldly social ideas very strongly. More importantly, we find passages in Plotinus' writings where he characterizes the Intellect as a sort of ideal community of beings who lead a life of connectedness and friendship. In III.2 [47] 1.30–33, for instance, the cosmic *nous* is characterized as follows:

> But the whole life of it and the whole intellect lives and thinks all together in one, and makes the part the whole and all bound in friendship with itself, since one part is not separated from another and has not become merely other, estranged from the rest; and therefore, one does not wrong another, even if they are opposites.

The parts of *nous* can be described as connected in close friendship and not alienated from each other; they do not harm each other, although they are considerably different or even opposed. What Plotinus develops here might be called the idea of an intelligible realm of friendship. Similarly, in IV.8 [6] 4, Plotinus emphasizes that those souls who are permitted to remain in the higher world are connected in a universal monarchy. Plotinus explicitly claims that the individual souls in the higher world participate in this monarchy: "they share with the universal soul in its government, like those who live with a universal monarch, and share in the government of his empire; these also do not come down from the abode of royalty: for they are then all together in the same place" (IV.8 [6] 4.6–9). Plotinus then continues by characterizing the descent of soul to the inferior world as separation, alienation, particularisation and the like. It seems to be no exaggeration to claim that he postulates an intelligible realm of justice, equality, and friendship.

A text showing a similar tendency is IV.3 [27] 18.14–22. Here, Plotinus claims that there is, in the intelligible world, a sort of direct, non-linguistic understanding and empathy between all beings living there. Instead of a spoken or written language that serves in our world for purposes of doubtful or disputed character, the members of this community possess an immediate intuition about the state of each other similar to the knowledge of another person obtained by a look in his or her eyes. This non-linguistic empathy of beings seems to contain a genuinely moral ideal—that of a perfect community where all desires, needs and interests are respected and fulfilled. But one may object that such an ideal serves no purpose as long as it has no consequences for moral and political questions of our earthly life.

Is it possible to defend Plotinus against the objections from self-immunisation and escapism? One might point out that, according to him, we can expect an otherworldly moral community reconciling all individual and social differences. Additionally, he admits that the way towards self-perfection and ascent is open to everyone. He excludes nobody from the chance to return to the higher world, even if that might not happen, following his theory of reincarnation, during someone's present incarnation. Seen in this way, it would be up to each agent if it takes him a long or a short way to reach the goal. The logic of reincarnation is a moral problem of its own. The basic idea spelled out in several passages of the *Enneads* is the law of retribution. According to III.2 [47] 13.8–17, there exists a world-order which is inescapable; it ineluctably punishes a person who commits a crime by letting him suffer, in a future life, precisely what he has now done to others. For example, a son who murders his mother will be punished by coming back as a woman who will be killed by her own son, and a man who rapes a woman will be attacked in the same way by a rapist in a future reincarnation (IV.3 [27] 16). To our mind, there are two serious problems with this account. One is that divine providence must thus instrumentalize persons who have to commit the murder or the rape in order to establish a state of justice; but if this happens then the agents under consideration were not guilty since they didn't freely choose to act this way. Divine providence would inspire them and thus generate a new reason for retribution; but seen from this perspective, the idea of morality becomes nonsensical. The other is that this line of thought weakens (or even abrogates) the idea of solidarity. If suffering from moral evil is always the result of having committed the same atrocities in former lives, then there is no need to support the victims, since they are not perpetrators to a lesser extent than the people who are now committing the crime.

Let us finally get to the objection from morally relevant goods. [c] This is probably the strongest objection against the Plotinian account of *eudaimonia*. It is difficult to see

how to answer the challenge that Plotinus ignores those items which, in our opinion, count as relevant moral goods: life, health, freedom, absence of pain, shelter, nourishment, basic income and the like. None of these is a real prudential good for Plotinus, and hence, none of these is of substantial moral importance.

At first glance, the logic of reincarnation seems to contradict our impression since it implies that moral evil (for example murder, theft, or rape) is terrible and should be punished, at least by the divine world-order. Consequently, he strictly warns us not to commit crimes and evils of that sort. But on the other hand, he clearly denies that we should intervene against this type of evil. In III.2 [47] 8, he claims that moral evil—that is, evil things brought about by other people who are seriously harming and damaging others—is no reason to help the persons which are harmed or damaged, since the evil is the legitimate punishment for their insufficient training. This line of thought is spelled out by the metaphor of a sports field where one group of physically trained boys (who are described, simultaneously, as morally corrupt) defeats another group in a wrestling contest and afterwards takes away the belongings of the losers. Plotinus comments that the beaten boys do not deserve our help or compassion, but should even be laughed at:

> If some boys, who have kept their bodies in good training, but are inferior in soul to their bodily condition because of lack of education, win a wrestle with others who are trained neither in body or soul and grab their food and their dainty clothes, would the affair be anything but a joke? Or would it not be right for even the lawgiver to allow them to suffer this as a penalty for their laziness and luxury, these boys, who, though they were assigned training-grounds, because of laziness and soft and slack living allowed themselves to become fattened lambs, the prey of wolves? But those who do these things are punished, first by being wolves and ill-fated men; and then as well there lies before them what people like this are destined to suffer; it does not come to a stop when they have become bad here and die; every time the rational and natural consequences follow what has gone before, worse for the worse, better for the better.
>
> (III.2 [47] 8.16–3)

The boys are beaten by the others appropriately since they neglected their physical training. Plotinus wants to show that people who disregard the perspective of the higher reality deserve their bad luck. Persons who show a lack of philosophical training are rightly damaged by the immoral deeds of others.

One crucial passage on the goods which an agent should pursue is II.9 [33] 9. Here we are informed that the sage completely ignores apparent goods like wealth or political power since, in his eyes, they do not promote happiness. Plotinus explicitly claims that there exist two entirely different ways of life on earth: that of the sage and that of ordinary people; the wise man is strictly directed to the highest good and to the superior world. The perspective of this real good, he says, is completely different from that of commonsensical goods adopted by ordinary people. Plotinus concludes his thought by asking the rhetorical question what should be wrong with this world, if it might be "like a sports-ground, where some win and other lose" (14–5). He continues: "If you are wronged, what is there dreadful in that to an immortal? And even if you are murdered, you have what you want" (15–6, cf. I.4 [46] 15.1–11).

Another telling passage is to be found in III.2 [47] 5. Here Plotinus claims that "it is possible for souls to become happy even in this world." If somebody fails to attain

happiness in this world, this failure is due not to the imperfect world-order, but his own shortcomings. "We must not blame this place if some are not well off, but their own incapacity, in that they have not been able to take a noble part in the contest for which for which the prizes for virtue are offered" (2–4). The inferior world is a perfect order (given its necessarily suboptimal preconditions) even if it includes for example poverty and disease. Such evils mean nothing to the sage, but do have some pedagogical value for those who are not wise. "Poverty and disease are nothing to the good, but advantageous to the bad" (6 f.). What Plotinus means is that deprivation and sickness lead to death and thus allow bad people to enter a new form (*logos*) and to be given a new chance.

The conclusion that this-worldly goods are of no importance can be attenuated only slightly by a look at I.4 [46] 6–7. Here, Plotinus develops a short, but precise account of what should be considered good. He starts by defending the thesis that *eudaimonia* cannot be "a collection of goods and necessities" (6.8), since otherwise there would be no single final end. It is clear that the expression "goods" (*agatha*) is reserved, here as generally in ancient moral philosophy, for constitutive elements of happiness. But what are "necessities" (*anankaia*)? We are informed that they are called goods, too, but they do not, in fact, contribute to *eudaimonia*. According to Plotinus, our true inclination or will is directed entirely to the superior world; this shows that there is one single final end. What, then, is the sense and the function of the necessities? Probably *anankaia* means primarily the resources necessary for surviving (such as food, shelter, or clothes), and Plotinus explicitly includes health and the absence of pain (25). As the context indicates, he has in mind the entire cluster of earthly goods. As Plotinus points out, we normally do not appreciate health or freedom from pain as long as we have it. This shows that they do not increase the degree of happiness (28): a remark which seems to be addressed to Antiochus of Ascalon or some other Peripatetics who believed that happiness can be realized in different degrees.

Why, then, might it be appropriate to wish for the *anankaia*? Plotinus gives no clear answer. In chapter 7, it is not even obvious whether he provides a descriptive or a normative account of the *anankaia*. On one reading, Plotinus does not recommend striving for them, but he observes that even the happy person usually wishes to possess them. Plotinus gives two reasons why. First, even if they do not increase someone's happiness, the *anankaia* contribute to someone's being (3). Second, if they are lacking, the presence of their opposites disturbs the pure possession of the final end (4f.). This observation, Plotinus tells us, does not imply that a lack of *anankaia* could diminish the happiness of the sage. To resume, Plotinus characterizes the possession of the *anankaia* as indifferent for the inner happiness of the sage, but as helpful. This is at least a mild recognition of the relevance of commonsensical goods.

References and Further Reading

Text and translation

Henry, P. and Schwyzer, H. R., 1951–73: *Plotini opera*, 3 vols., Paris/Brussels (Editio maior).
Henry, P. and Schwyzer, H. R., 1964–82: *Plotini opera*, 3 vols., Oxford (Editio minor).
Plotinus, 7 volumes, Greek text with English translation by A. H. Armstrong, Cambridge, MA: Loeb Classical Library, 1968–88.

Other works

Atkinson, M. (1983) *Plotinus, Ennead V. 1. On the Three Principal Hypostases. A Commentary with Translation*, Oxford: Oxford University Press.
Beierwaltes, W. (1985) *Denken des Einen. Studien zur neuplatonischen Philosophie und ihrer Wirkungsgeschichte*, Frankfurt: Klostermann.
Beierwaltes, W. (1991) *Selbsterkenntnis und Erfahrung der Einheit. Plotins Enneade V,3. Text, Übersetzung, Interpretation, Erläuterungen*, Frankfurt: Klostermann.
Blumenthal, H. J. (1971) *Plotinus' Psychology*, The Hague: Martinus Nijhoff.
Brisson, L. (2000) "Entre physique et métaphysique. Le terme onkos chez Plotin, dans ses rapports avec la matière (hylê) et le corps (sôma)," in: M. Fattal (ed.), *Etudes sur Plotin*, Paris: 87–111.
Brisson, L. et al. (eds.) (1992) *Porphyre, La vie de Plotin, vol. II. Études d'introduction, texte grece et traduction française, commentaire, notes complémentaires, bibliographie*, Paris: Vrin.
Des Places, É. (1973) *Numénius: Fragments*, Paris: Les Belles Lettres.
Dufour, R. (2002) *Plotinus: A Bibliography 1950–2000*, Leiden: E. J. Brill.
Emilsson, E. (1988) *Plotinus on Sense-Perception*, Cambridge: Cambridge University Press.
Emilsson, E. (2007) *Plotinus on Intellect*, Oxford: Oxford University Press.
Fattal, M. (1998) *Logos et image chez Plotin*, Paris/Montréal: L'Harmattan.
Gerson, L. P. (1994) *Plotinus*, London: Routledge.
Gerson, L. P. (ed.) (1996) *The Cambridge Companion to Plotinus*, Cambridge: Cambridge University Press.
Hadot, P. (1999) *Plotin, Porphyre. Études néoplatoniciennes*, Paris: Les Belles Lettres.
Horn, C. (1995) *Plotin über Sein, Zahl und Einheit. Eine Studie zu den systematischen Grundlagen der Enneaden*, Stuttgart/Leipzig: Teubner.
Kühn, W. (2009) *Quel savoir après le scepticisme? Plotin et ses prédécesseurs sur la connaissance de soi*, Paris: Vrin.
Lacrosse, J. (2003) *La philosophie de Plotin*, Paris: Presses Universitaires de France.
Mortley, R. (1986) *From Word to Silence*, 2 vols., Bonn: Hanstein.
Narbonne, J. M. (1994) *La métaphysique de Plotin*, Paris: Vrin.
O'Brien, D. (1991) *Plotinus on the Origin of Matter. An Exercise in the Interpretation of the Enneads*, Naples: Bibliopolis.
O'Meara, D. (1993) *Plotinus: An Introduction to the Enneads*, Oxford: Oxford University Press.
O'Meara, D. (2003) *Platonopolis. Platonic Political Philosophy in Late Antiquity*, Oxford: Oxford University Press.
Remes, P. (2007) *Plotinus on Self. The Philosophy of the "We,"* Cambridge: Cambridge University Press.
Rist, J. (1967) *Plotinus: The Road to Reality*, Cambridge: Cambridge University Press.
Schniewind, A. (2003) *L'éthique du sage chez Plotin. Le paradigme du spoudaios*, Paris: Vrin.
Schroeder, F. M. (1992) *Form and Transformation. A Study in the Philosophy of Plotinus*, Montreal: McGill-Queen's University Press.
Vassallo, C. (2009). *La dimensione estetica nel pensiero di Plotino. Proposte per una nuova lettura dei trattati "Sul bello" e "Sul bello intelligibile,"* Naples: Giannini.
Wilberding, J. (2006) *Plotinus' Cosmology, A Study of Ennead II, 1 (40), Text, Translation and Commentary*, Oxford: Oxford University Press.

Related chapters

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43
PORPHYRY AND IAMBLICHUS

George Karamanolis

Introduction

Porphyry (born in 234) and Iamblichus (born c. 240), Platonist philosophers of the same generation, flourished in the second half of the third century AD. The two philosophers were in contact and dialogue with each other and probably had a teacher–pupil relationship. In philosophical terms there is much that binds the two philosophers together and makes it sensible to study them jointly. Iamblichus was influenced by Porphyry but also reacted critically to his views. More importantly, though, both Porphyry and Iamblichus further develop Plotinus' philosophy, but they do so in ways which are sometimes at odds with Plotinus' thought.

Like all Platonists, Porphyry and Iamblichus distinguish between the intelligible realm and the sensible realm, while also positing a strong relation between them that accounts for unity in reality. Like Plotinus, as well as Moderatus and Numenius before him, Porphyry and Iamblichus maintain that there is an intelligible cause which is ultimately responsible for the unity of everything there is. The world as we perceive it, however, displays not only unity but also intelligibility. This is because things in the sensible world are marked by intelligible features, that is, they have identities or essences, and these are intelligible entities that can be grasped by our minds. Thus both the intelligibility and the unity of the intelligible and the sensible realms are accounted for by intelligible principles. Plato's dialogues offer some candidates for such principles: the Form of the Good in the *Republic*, the divine Intellect in the *Timaeus*, the One of the first hypothesis of *Parmenides*. The degree of unity and simplicity exhibited by these principles varies. The highest degree is exhibited by the One. Since unity must be logically prior to multiplicity, the first principle is postulated to be the One. This was identified already by Numenius (frs. 16.14–15, 20.10–12 Des Places) with the Form of the Good in *Republic* 509b, which is said to be beyond being. Thus the One is posited by Plotinus as the ultimate principle of unity and goodness of the world but, given its transcendence and ultimate simplicity, it needs to be supplemented by further principles in accounting for the sensible world. The Intellect follows as the principle of intelligibility and of creation, since it is in the Intellect according to the *Timaeus* (30d–31a, 39e) that the essences or the Forms of everything are accommodated, and these Forms are the models of everything that comes into being in the sensible world (*Timaeus* 29b, 30c). This is a crucial move, because thus the Forms are both causes of sensible things and also objects of thought of the divine Intellect, that is, they account both for the being of the

sensible things and for the conceptualization of them. There is finally the principle of Soul, which both mediates in the coming about of the sensible world by the imparting in the latter the Forms hosted in the Intellect, while it also accounts for living beings, including the world itself (see Remes 2008: 42–59).

Porphyry and Iamblichus follow Plotinus in distinguishing (by the criterion of unity and simplicity) three main levels of intelligible being: of the One, of Intellect and the intelligibles, and of Soul. Although they broadly agree with Plotinus on the demarcation of these levels and their hierarchy, they seem to be not entirely satisfied with how Plotinus speaks of their relation to each other. One of their concerns is the continuity of these levels of being. Associated with this concern is the question of how each intelligible principle retains its identity while also playing a causal role in the chain of being. Each intelligible principle has to inform or produce the lower one (what is known as *proodos*), otherwise reality would be discontinuous, while the lower entity is inspired by, and turns to, the higher one (what is known as *epistrophē*). The question then is how a principle can have a causal role in producing some product and still be essentially different from it. Related is the question of how the intelligible principles, which are transcendent, are present in the sensible realm, a topic addressed by Plotinus in *Enneads* VI.4–5. How does the Intellect with its Forms give rise to individual intellects and immanent forms, and how is the Soul the cause of all souls?

One special issue that concerns both Porphyry and Iamblichus is the ontological status of the soul. Since the soul is responsible not only for life and motion but also for cognition, as is also the intellect, there is some disagreement between them regarding the demarcation of the two entities. Unlike Plotinus, Porphyry and Iamblichus are much preoccupied with the soul's journey into and out of the body, and they are concerned with the purification and salvation of the soul. In this area there is again some disagreement between them. While Porphyry maintains that virtue and intellectual contemplation (*theōria*) suffice for the liberation of the soul from the bonds of the sensible world, Iamblichus defends the possibility of resorting to ritual acts in order to purify the soul. The root of their difference stems from their disagreement about the extent to which the human soul has an intellectual character. The controversy on this issue is developed in Porphyry's *Letter to Anebo* and Iamblichus' *On Mysteries* (*Myst.*), more precisely entitled *A Reply of the Priest Abamon to the Letter of Porphyry to Anebo*.

Finally, Porphyry and Iamblichus are guided by a similar understanding of the history of philosophy. They acknowledge the unique significance of Pythagoras and assume that Plato and, to a lesser extent, also Aristotle draw on him. They also appear to maintain that the philosophy of Aristotle is in essential agreement with, and complementary to, that of Plato. The significance they attribute to Pythagoras, Plato, and Aristotle shapes their practice of philosophy, which to a large extent takes the form of exegesis. Both Porphyry and Iamblichus invest much energy in writing long and detailed commentaries in order to serve didactic purposes. The study and composition of commentaries was an established practice by the time of Plotinus (*Life of Plotinus* 14), but Porphyry and Iamblichus developed it further and consolidated it. Their Platonist identity does not prevent them from writing commentaries also on Aristotle (Karamanolis 2004). They apply a specific interpretative strategy to their exegesis, which consists in taking as a guide to their interpretation the intended subject matter (*skopos*) of the Platonic or the Aristotelian work under discussion. Misidentification of the subject matter of a philosophical work leads, necessarily in their view, to a mistaken interpretation. In the case of Aristotle's *Categories*, for instance, Porphyry opposes claims to the effect that

Aristotle advances in this work a non-Platonist ontology, arguing that its intended subject matter is significant words rather than kinds of being. Hence he commends the *Categories* as a work of logic.

Porphyry

Life and works

The most important source for Porphyry's life is his biography of his teacher Plotinus (*Life of Plotinus*; hereafter *VP*). Complementary to that source is Eunapius' *Lives of Sophists* (Beutler 1953: 276). From the evidence that Porphyry presents in his *Life of Plotinus* we learn that he was born in Tyre in Phoenicia in 234 BC (*VP* 4.1–9, 23.12–14) of Semitic origin and was named "Malchos" (meaning "king" in Greek; *VP* 17.4–15), which Longinus changed to "Porphyry," alluding to the color of the royal dress (*porphyra*) that Phoenicians produced (Eunapius *Lives of Sophists* 4.1). Porphyry studied initially in Athens with Longinus, but it is unclear for how long. In 263 Porphyry came to Rome to join Plotinus' circle, but he remained in contact also with Longinus (as Longinus' letters in *VP* testify). After five and a half years in Plotinus' school (*VP* 5.1, 6.1–3), Porphyry became seriously depressed and, on Plotinus' advice, moved to Sicily to recover (*VP* 11.11–19). In Sicily Porphyry wrote Plotinus' biography (at the age of 68, that is, in 301; *VP* 23.12–14) and prepared an edition of Plotinus' work. At this stage in life he married the widow Marcella, addressed in his *Letter to Marcella*. He lived until the time of Diocletian (Suda 4.178.16; test. 2 Smith), and probably died around 305.

We know that Porphyry had students and was influential already in his lifetime, but it is unclear whether he ran a school. His long commentary on Aristotle's *Categories*, of which only fragments are preserved, is addressed to a certain Gedaleios, while his short commentary on the *Categories*, the *Isagōgē*, and two more treatises, the *On what is up to us* and *On the difference between Plato and Aristotle* are addressed to Chrysaorius, a Roman aristocrat, a descendant of the family of Symmachi, and a beginner in philosophy (Elias *in Isagogen* 39.8–11, 93.17–19; Bidez 1913: 58–60). Reportedly, Iamblichus too was among Porphyry's students (Eunapius *Lives of Sophists* 5.1.2, David *in Isagogen*. 92.6, Suda 4.178.16; test. 2 Smith), and we know that Porphyry dedicated to him the treatise *On knowing yourself* (fr. 273 Smith). Eunapius speaks of Iamblichus' "attachment" to Porphyry, which suggests personal contact and not only a dialectical relation between the two. If this is true, perhaps Porphyry did have a circle of students.

Porphyry was a man of multiple interests and talents and a prolific author. One of his achievements was the edition of Plotinus' writings, the only one of such quality that survives from antiquity, which was inspired by similar endeavors such as Andronicus' edition of Aristotle (*VP* 24.6–11). Porphyry assembled and allegedly corrected Plotinus' works, and divided them into six groups of nine treatises, called *Enneads* (from the Greek word for nine, *ennea*), provided them with titles, and arranged them in ascending order of complexity and importance (*VP* 24.11–16). The edition of Plotinus' work is motivated not merely by Porphyry's admiration for it, but also by his desire to promote Plotinus' philosophical ideal, which he considered to be the liberation of oneself (see Saffrey 1992).

Porphyry made a reputation as an exegete, being the author of many commentaries on works of Plato, Aristotle, Plotinus, and also Ptolemy. Of these, only two are extant today: Porphyry's short commentary on the *Categories* and his commentary on Ptolemy's

Harmonics. For the rest, we have fairly good evidence regarding Porphyry's commentaries on the *Sophist*, the *Timaeus* (fragments in Sodano 1968), the long commentary on the *Categories*, his commentary on the *On Interpretation*, and on *Physics* (that is, the first five books; fragments in Smith 1993). No evidence survives of Porphyry's commentaries on some of Plotinus' works (*VP* 26.29–32). Several other commentaries have been ascribed to Porphyry, on Plato's *Cratylus*, the *Philebus*, the *Phaedo*, the *Republic*, Aristotle's *Prior Analytics*, the *Sophistical Refutations*, the *Metaphysics*, and the *Nicomachean Ethics* (Beutler 1953: 279–284, Smith 1993), but the evidence leaves it open what exactly Porphyry contributed to the interpretation of these works (see Chase 2012: 1352–5). Particularly controversial remains the incomplete anonymous commentary on Plato's *Parmenides*, which was attributed to Porphyry by Pierre Hadot in 1968 and has been debated ever since (see Smith 1987: 740–741). Some dispute even that it was written after Plotinus (Bechtle 1999), yet others (for example Dillon 2007) point to linguistic and doctrinal elements suggesting strong affinities with Porphyrian language and thought.

Apart from commentaries, Porphyry wrote several other philosophical works (many listed in Suda 4.178.14–179.2; test. 2 Smith). I divide them into six areas: metaphysics and logic, psychology, ethics, aesthetics, religion, and history of philosophy. In the first area belong the *Isagōgē*, which is an introduction to Aristotle's theory of predication (see Barnes 2003, Chiaradonna 2008), the treatises *On Principles*, *On Matter*, *On Incorporeals*, of which only fragments survive (in Smith 1993). Porphyry's works on the soul include the extant *To Gaurus on how human embryos are ensouled*, as well as the *On the Soul against Boethus*, *On the faculties of the soul*, both preserved in fragments. Porphyry's ethical works comprise the extant *On Abstinence from eating food from animals* and the fragmentary *On what is up to us* and *On knowing yourself*. A more wide-ranging work is the *Sentences*, or *Starting points leading to the intelligibles*, a collection of 44 notes mostly of aphoristic tone, which summarizes Porphyry's views on major philosophical topics. Porphyry also made contributions to the fields of grammar, poetics, and rhetoric, which display competence and erudition (Heath 2003). They include four works on Homer, *On the benefit the king can draw from Homer*, *On Homer's philosophy*, no longer extant, and *On the cave of the nymphs* and *Homeric Questions*, which are preserved. Porphyry had a keen interest in religion and religious rituals, which is characteristic of his era and is evident also in Iamblichus. Such works include *On Divine Names*, *On Statues*, the *Philosophy from oracles*, and *Against the Christians*, which was fiercely opposed by Christians. Finally, Porphyry shows considerable interest in the history of philosophy. He is the author of a partially preserved *History of Philosophy*, the already mentioned *Life of Plotinus*, a *Life of Pythagoras*, and two no longer extant works *On the School of Plato and Aristotle Being One*, and *On the Difference between Plato and Aristotle* (see Karamanolis 2006: 245–66). The range of Porphyry's works shows that his engagement with philosophical questions had a cultural and educational dimension, which is lacking in Plotinus' work.

Philosophy: First Principles

Porphyry adopts Plotinus' doctrine of first principles and elaborates on certain aspects of it. Porphyry's position is presented in a nutshell in *Sententia* 31.

> God is everywhere because he is nowhere, and Intellect is everywhere because it is nowhere, and Soul is everywhere because it is nowhere. But God is

> everywhere and nowhere in respect of all things, since all things come after him—it is his characteristic to be only as he is and as he wills; while Intellect is in God, on the one hand, but is everywhere and nowhere in respect of what comes after it; and Soul is in Intellect and God, on the hand, but everywhere and nowhere in respect of the body; and as for body, it is both in Soul and in Intellect and in God.
>
> (trans. J. Dillon in Brisson 2005)

This text is indicative of how Porphyry thinks of the hierarchy of the intelligible principles. At the top of the hierarchy is God or the One, which is proclaimed to be the source of all things including the Intellect and Soul. As suggested at *Parmenides* 144e, the One contains all things, though not, Porphyry claims, in the way that the Intellect does, namely as thoughts, but rather in a non-intellectual and supra-essential way (*anennoētōs kai hyperousiōs: Sent.* 10), that is, in a way that goes beyond being altogether. Accordingly the One is said to be beyond all things (*epekeina*; *Sent.* 10, 12, 25; cf. *Enn.* III.8.9.2, V.3.10.5). Since the One is also beyond the Intellect, it cannot be contemplated by intellection but rather by a non-intellection (*anoēsia*), which Porphyry assumes to be superior to intellection (*Sent.* 25; cf. *Sent.* 26). This seems to go against Plotinus' view at *Enn.* VI.8, although elsewhere Plotinus comes close to it (*Enn.* VI.9.4.13; Pepin in Brisson 2005: 566). Porphyry's view, however, that the One has life peculiar to itself (*Sent.* 12) is clearly at odds with Plotinus' assertion that the One does not have life (*Enn.* III.8.10.29–30, III.9.9.17–18). If the One is beyond all things and nothing can be predicated of it (*Enn.* III.8.11.13–14), we wonder how it can be said to have any feature at all.

Porphyry nowhere gives a straight answer to this. In a fragment from his *History of Philosophy* he suggests that the Intellect is pre-eternal and self-generating (fr. 223 Smith). This is corroborated by a report from Proclus according to which the Intellect is linked with the One for Porphyry (*TP* 1.11; fr. 232 Smith). Another testimony of Proclus sheds further light here, apparently suggesting that according to Porphyry the subjects of the first two hypotheses of the *Parmenides* are equally the One, yet in two different aspects (*in Parm.* 1070.15–1071.3 Cousin; Dillon 1992, 2007). On this issue Porphyry differs again from Plotinus, who identified the subject of the first hypothesis as the One and the subject of the second hypothesis as the Intellect. Porphyry probably distinguishes two aspects of the One, one ultimately transcendent, inert, and ineffable, and one causal, creative, accounting for everything there is (Dillon 1992, 2007, 2010). Through this distinction Porphyry presumably tried to explain away one of the difficulties arising from Plotinus' concept of the One, namely how this principle contains all things while being absolutely beyond them. By distinguishing two aspects of the One, one inert and ineffable and one creative and accessible, Porphyry tackles this difficulty, but at the cost of bringing the One close to the second hypostasis, the Intellect. This was exactly the point of Damascius' criticism (*On Principles* I.86.10–16; fr. 367 Smith).

Porphyry may well have tried both to bridge the gap between the One and the Intellect, and thus establish greater continuity in the intelligible realm, and yet keep them distinct. The relation between the two is amply discussed in the anonymous, presumably Porphyrian, commentary on Plato's *Parmenides*, yet it does not make much clearer what the suggested solution is to the issue (see Strange 2007: 31–4). A clue comes from a report of Damascius, according to which for Porphyry "the single first principle of all things is the father of the noetic triad" (*On Principles* 1.86.9–10; fr. 367 Smith). Apparently Damascius suggests that Porphyry conceives the Intellect as consisting of three

levels, namely the father, his power or life, and his intellect. The first of these levels is identified with the creative aspect of the One, while the second is the level at which the Intellect participates of the One, which is presumably inspired by the otherness between one and being, mentioned in *Parmenides* 143b (Dillon 2007: 57–8). Presumably Porphyry appealed to such mediation in order to explain how the first principle is the cause of the second.

Porphyry follows Plotinus in maintaining that the intelligibles exist in the Intellect, which he identifies with the divine craftsman of the *Timaeus* (Eusebius, *Praep. evang.* 3.9.3; Porphyry *De cultu* fr. 354.43–51 Smith, Proclus *in Tim.* 1.393.10–32). He also suggests that the creation consists in a timeless unfolding of the forms from the Intellect through the Soul (Proclus *in Tim.* 1.439.29–440.16, Cyril *Adversus Iulianum* 1.32d; fr. 223 Smith), a view defended already by Plotinus (*Enn.* III.2.2). On this view, there is no priority of disordered matter to the order that comes about through the imposition of forms. Matter, Porphyry claims, cannot be thought of, except when informed (*Sent.* 20.5–7; cf. *Enn.* II.4.5; Brisson 2005: 108–10). Porphyry argues that the activity of thinking of the Intellect brings about matter and forms at once (Proclus *in Tim.* 1.392.12, 395.9–21; Deuse 1981: 255–61, Karamanolis 2006: 280–84). Hence the world is the realization of the forms existing as thoughts in the Intellect.

This view was criticized by Iamblichus on two counts. First, Porphyry's explanation of the procession of forms neither distinguishes nor accounts for forms realized singularly (for example, sun) and forms realized in multiplicity (for example, man; Proclus *in Tim.* I.440.16–21; Taormina 1999: 31–36). The second criticism was that Porphyry did not distinguish clearly between Intellect and Soul, which explains why Proclus confusedly reports that Porphyry identifies the divine craftsman both with the Intellect (*in Tim.* 394.2–9, 395.11–12) and with the Soul (ibid. 1.306.32–307.2; Smith 1987: 729–30). Porphyry was presumably concerned again to establish the continuity of levels of being and to fend off implications that creation is a process (Deuse 1981: 251–3). Porphyry's view that God did not create matter but only qualities (*logoi*) which in their combination make up material entities, is confirmed by passages in his logical works (see below).

Theory of soul

Like Plotinus, Porphyry places the Soul below the Intellect. One reason for this is that, on the basis of *Timaeus* 35a1–4, it is assumed that the Soul is "a sort of intermediary between the indivisible essence and the essence which is divided about bodies," while the Intellect is indivisible (*Sent.* 5; cf. *Enn.* IV.1, IV.2.1). The Soul is divisible to the extent that it is divided among individual bodies. The relation between the Soul and the individual souls preoccupied Porphyry as much as it did Plotinus (cf. *Enn.* IV.3.5). Porphyry warns us of the danger of inferring that there are many souls on the grounds that there are many ensouled bodies; he argues that there is only one soul, which is the principle of all souls, whose power exists in all of them (*Sent.* 37). Accordingly, Porphyry, like Plotinus, distinguishes between the principle of souls, that is, the transcendent soul, or the Soul, and the embodied, individual soul, which is ontologically dependent on the former. More specifically, the individual soul is a power derivative from the transcendent Soul, and is often described as being a reflection or shadow of the transcendent Soul (*Enn.* IV.3.10.38–40, IV.4.18.7; *Sent.* 10.3), or a soul in relation (*kata skhesin*), as opposed to the soul in itself (*kath' heautēn*), the transcendent Soul (*On the faculties of the soul* frs. 253.110–17, 261.56–60 Smith).

For Porphyry the relation between the transcendent and the individual soul is an instance of a general metaphysical relation between two kinds of incorporeals: proper and improper ones (*Sent.* 42; see Chiaradonna 2007b). The former subsist, that is, exist by themselves, such as, for instance, the intellect or the soul, while the latter exist only through privation from the body. Proper incorporeals are not present with their being or essence in bodies; rather, their being is such that it has a certain inclination (*rhopē*) as a result of which they impart a power to bodies (*Sent.* 4). Porphyry follows Plotinus' doctrine of double activity (for example, *Enn.* V.4.2.27–30), according to which the Soul is active as such while also imparting a power, the individual soul, in the way the sun shines and also illuminates the air (fr. 261 Smith). It is similar for the transcendent and the immanent forms: the former are not divisible and yet exist in different material entities through a power they transmit (*Sent.* 35), namely the immanent form, which relates to its source as the form imprinted on what is sealed relates to the form of a seal (*in Ptol. Harm.* 14.17–21). As the body does not subsist by itself but is brought about through the soul that informs it in such a way that it is living (*On the faculties of the soul* fr. 259.67–74 Smith), similarly there exists no matter to be molded by the forms (*Sent.* 20, p. 10.12–11.2 Lamberz), but rather the forms which flow from the divine intellect bring about matter necessary for material entities to come about (Proclus *in Tim.* 1.300.1–6, I.439.29–440.16).

Porphyry maintains, then, that the individual soul in body is a derivative power of the transcendent soul and that the individual soul of a living body relates to the body it enlivens as immanent forms relate to matter in sensible entities. Porphyry employs the analogy of the musician shaped by the knowledge of harmony to illustrate the soul–body relation (*Sent.* 18; Karamanolis 2006: 287–92). In the same way that harmony exists separately but also inseparably from the musician informed by it, similarly the soul exists separately from the living body but also as the form of the living body, that is, inseparably from it. As the harmony makes the musician the kind of being he is, that is, an actual musician, similarly the soul makes a body a living body. In this sense the soul is the actuality (*entelecheia*) of the living body. Porphyry, however, distinguishes this soul, the irrational soul, which he calls *empsychia* (*Against Boethus* fr. 248.12), from the intellective or rational soul, which amounts to the human intellect, considered to be man's essence and common element with God (ibid. fr. 244; cf. Plotinus *Enn.* III.5.8.11–20, IV.8.1.1–7; Karamanolis 2007). The intellective or rational soul is separable from the body (fr. 245 Smith), while the irrational soul is not (fr. 248.13–15 Smith). Hence Porphyry defends the immortality of the rational soul (*Against Boethus* frs. 244–5 Smith), while he does not defend the immortality of the irrational soul. The irrational soul does not exist separately from the body it actualizes by means of faculties which account for the functions of the living body (*On the faculties of the soul*, frs. 251–5 Smith), and in this sense it does not survive.

It would be odd, however, for a Platonist to claim that a kind of soul perishes. Porphyry rather maintains that it is dissolved in some way into the celestial spheres (Proclus *in Tim.* 3.234.18–26, Iamblichus *On the soul* in Stobaeus 1.384.19–23; Smith 1974: 65–6), and in this sense it is preserved in the world. Iamblichus objects to this idea, holding that the irrational soul as such is preserved in the world without being dissolved (*On the soul* in Stobaeus 1.384.3–7; Finamore 1985: 11–19, Finamore and Dillon 2002: 180–183). Iamblichus also criticizes Porphyry for confusing man's soul and intellect (*On the soul* in Stobaeus 1.365.19–24; fr. 441 Smith). The question of the two kinds of soul, the irrational and the rational or intellectual, arises in Porphyry's treatise *To Gaurus on how the embryos are ensouled.* There Porphyry claims that the embryo is initially

like a plant, endowed only with the *physis* given by its parents, who contribute *logoi*, features or properties, to the future offspring. This combination results in a vegetative soul. The individual soul, however, enters the body at birth through the providence of the world-soul.

Ethics

Since our intellect is not essentially different from the Intellect, and given that for Plotinus and Porphyry the intellect is our true self, we should live as befits intellectual beings. This means that making sense of intelligible reality should ultimately shape one's life. Porphyry maintained that one's soul should distance itself from the sensible world, turn towards the Intellect, and live accordingly (*Sent.* 30, 32, 37).

Porphyry follows Plotinus in maintaining that the end of human life is happiness, which amounts to man becoming like God, a view already advanced in Plato (*Theaetetus* 176a–b) and Aristotle (*Eth. Nic.* 10.6–7). For Plotinus and Porphyry man, like God, is essentially intellect. The means to achieve this end is virtue. Since they consider the human soul to be essentially an intellect, however, for them virtue amounts to thinking, and there are different levels or kinds of thinking. Porphyry develops Plotinus' theory of virtue, according to which virtue is distinguished in kinds (inspired by *Republic* 427e–444e and *Phaedo* 67a–69c, 79c–e). These are civic (*politikai*) virtues, which consist in the domination of reason over bodily passions (*Enn.* I.2.2.13–18); purificatory (*katharseis*) virtues, which consist in the liberation of the soul from bodily passions (*Enn.* I.2.3–5); and theoretical virtues, which involve man's turning towards the intellect (*Enn.* I.2.6–7). The latter is the highest level of virtue and consists in the undistracted operation of the intellect. Porphyry distinguishes instead four levels of virtue: civic, purificatory, theoretical, and also paradigmatic (*Sent.* 32). The final level of virtue, which is absent from Plotinus, occurs, Porphyry suggests, when the turning of the soul towards the intellect is complete. If so, this is not virtue of the soul any more but of the intellect, and thus it is at odds with Plotinus' view according to which "the virtue is of the soul, not of the intellect nor of what lies beyond it" (*Enn.* I.2.3.30; Brisson 2005: 136). For Porphyry though, becoming like God amounts to becoming pure intellect, which is man's true self (*On knowing yourself* fr. 274 Smith), and this presupposes that man knows what one's true self is (frs. 274–5 Smith). Porphyry considers this state to amount to salvation of the soul (*Letter to Marcella* 8, 24, 32–4; *On the return of the soul* frs. 301a, 302 Smith; see Smith 1974: ch. 4).

Logic

Perhaps Porphyry's most influential contribution was his interpretation of Aristotle's *Categories* and its integration in the Platonist curriculum. Porphyry wrote two commentaries on this work. It was an innovation for a Platonist to comment on an Aristotelian work in this way, since writing an extensive commentary suggests acceptance of the views of the work that is commented upon (see Karamanolis 2004). Porphyry follows the model of Peripatetics such as Boethus, but his interpretation differs from theirs, as it is intended for Platonists. Porphyry's initiative had many followers in later generations of Platonists.

Porphyry's starting point for his interpretation of the *Categories* is that of Plotinus in *Enneads* VI.1–3. Plotinus maintained that the *Categories* is an ontological work which

divides all beings into a number of classes or kinds, but leaves out the intelligible beings, which for Platonists qualify as beings strictly speaking; in this sense Aristotle's division of beings is incomplete. Worse, Plotinus argues, Aristotle's theory is defective because it makes sensible beings qualify as substances, while for Platonists this ontological category applies strictly to intelligible entities and only homonymously to sensible ones. Porphyry does not overtly reject or criticize Plotinus' interpretation, but he takes a different line which is based on a different appreciation of the subject matter of the *Categories* (Strange 1987, Ebbesen 1990, Chiaradonna 1998, Karamanolis 2006: 312–19).

Porphyry argues that one cannot understand the *Categories* correctly unless one first realizes that this work does not examine things as such but rather how words relate to the things they signify. This, Porphyry argues, is suggested already by the term *katēgoria*, which, in his view, means a "significant expression applied to things" (*in Cat.* 56.7–9). Porphyry justifies his view by referring to Aristotle's statement that what is said "without any combination (*kata mēdemian symplokēn*; *Cat.* 4, 1b25–7) signifies (*sēmainei*)" an entity which falls under one of the ten categories, namely substance, quantity, quality, etc. and also to Aristotle's claim that only the combination of the categories can lead to affirmation (*Cat.* 4, 2a4–7; *in Cat.* 87.31–35). Aristotle's use of the verb "signify" and his reference to affirmation suggests to Porphyry that the categories, on which Aristotle focuses, concern words that signify, not beings (or classes thereof). More precisely, Porphyry argues, Aristotle's categories concern words that signify things ("stone," "animal"), as opposed to words that signify words ("noun," the word "animal"). Words of the first kind, he claims, are the most basic, operating like messengers that report to us about things (*in Cat.* 58.23–25). Aristotle's work, Porphyry claims, is about this kind of word (ibid. 58.5–8).

Within this class of words, Porphyry maintains, there are two sub-classes: words signifying substance and those signifying accident (*in Cat.* 95.13–16), and accordingly there are two kinds of predication: essential (for example, "Socrates is a man") and accidental (for example, "Socrates is white"). In the predication "Socrates is a man," "Socrates" is a particular substance, while "man" is a universal predicated of it. Aristotle argues in the *Categories* that particular substances are substances most of all (*Cat.* 5, 2b17), because they exist separately and are prior to nature (*Cat.* 5, 2b12–20, 14b11–13), while universal substances exist only as far as particular substances exist (*Cat.*5, 2b6).

This Aristotelian view met with criticism from Platonists such as Lucius, Nicostratus, and Plotinus, because for them Aristotle denied the priority of intelligible substances. Porphyry justifies Aristotle on the grounds that this position has to do with the subject matter of the *Categories*. He distinguishes the term that is predicated of something from the term that is not used in predication, for example the term "man" in "Socrates is a man," and "man" (Ebbesen 1990: 157–9, Chiaradonna 1998: 591–5). When predicating, a term signifies the essence of something, while outside predication it amounts to the concept, for example "man," which we use to think of a man. Porphyry distinguishes between (a) "man" as a universal concept, (b) "man" as predicate of a specific man, which is the essence of man, and also (c) "man," the transcendent Form which accounts for being man, more precisely, manhood (Simplicius *in Cat.* 82.35–83.20; see Lloyd 1990: 67–8). According to Porphyry, in the *Categories* Aristotle deals only with option (b). This, however, still does not tackle the issue of the priority of individual substances over universal ones in the *Categories*, which is unacceptable to Platonists. Porphyry's suggestion is that Aristotle rightly postulates the priority of individual substances to genera and species, because the former are understood collectively or as classes. Besides, in his view we could not conceive of the species man unless there were individual men

(*in Cat*. 90.29–91.7) According to Porphyry, Aristotle prioritizes individual substances because he deals with significant words, and words were invented primarily to signify particulars (ibid. 91.5–12; Karamanolis 2006: 316–17).

Porphyry's epistemology squares with his metaphysical view of the structure of sensible things. He speaks of concepts, which are essential for achieving secure knowledge (*epistēmē*). Concepts grasp the form (*eidos*) embedded in things, setting aside their material (*in Ptol. Harm*.14.10–14), and in this sense concepts are representations of forms (Chase 2010: 395–8). The latter are the *logoi* constitutive of things (ibid. 14.24–5), since for Porphyry sensible entities are conglomerations of *logoi* (*Isagōgē* 7.19–24; *in Cat*. 128.34–129.10). Porphyry follows Plotinus' view here (*Enn*. VI.3.8.19–37), and, as I mentioned earlier, he maintains that the creation of the world amounts to the flow of *logoi* from the divine intellect.

Iamblichus

Life and Works

Iamblichus was born into a distinguished family in the Syrian city of Chalcis (Eunapius, *Lives of Sophists* 5.1). Decisive for determining his life span is the testimony of Porphyry, according to which a son of Iamblichus, most probably our philosopher, married a woman of the circle of Plotinus (*VP* 9.4; Dillon 1987: 865–66). Iamblichus is attested to be student of Porphyry and of a certain Anatolius (Eunapius, *Lives of Sophists* 5.1.1–2), presumably the Aristotelian philosopher who later became Bishop of Laodicea (Eusebius *History of Church* 7.32.6; Dillon 1987: 866–7). There is an ongoing dialogue between Porphyry and Iamblichus, mostly critical on Iamblichus' part, as his commentaries on the *Timaeus*, the *Categories*, and his *On Mysteries* show. At some point, Iamblichus established his own school in Syria, yet it is undertain when and where (Bidez 1919, Dillon 1987: 869–73). His students included Aedesius, Sopater, Theodorus (Eunapius *Lives of Sophists* 5.1.5), as well as Dexippus, the author of a commentary on the *Categories* (Simplicius *in Cat*. 2.25, Dexippus, *in Cat*. 5.9). He must have died around 326 (Bidez 1919: 32).

Iamblichus was as prolific an author as Porphyry. Like Porphyry and many philosophers of this era, Iamblichus' writings can be divided into two categories: commentaries on Plato and Aristotle and treatises on philosophical issues. The existing evidence allows us to speak with certainty about four commentaries on Platonic dialogues—on the *Timaeus*, the *Parmenides*, the *Phaedrus* and the *Alcibiades* I—and of two Aristotelian commentaries—on the *Categories* and the *Prior Analytics*. We have evidence of Iamblichus' comments on other works of Plato and Aristotle, such as the *Phaedo*, the *Philebus*, the *On Interpretation*, but such evidence does not immediately suggest the existence of commentaries. Iamblichus' philosophical treatises include several works on metaphysics, like the *On Mysteries of Egypt*, *On Gods*, *On the Soul*, *Chaldean Theology*. His commitment to Pythagoreanism (O'Meara 1989) is manifest in works such as *A collection of Pythagorean doctrines*, *Pythagorean Life*, in his *Protrepticus* or *Exhortation to Philosophy*, and in works on mathematics, a subject favored by Pythagoreans, such as *On the general principles of mathematics*, a commentary on Nicomachus' *Introduction to Arithmetic*, and possibly also the anonymous *Theology of Arithmetic*.

The evidence of later philosophers, Olympiodorus, Proclus, Philoponus, Simplicius, and Damascius, suggests that much of Iamblichus' philosophical output has been lost. The same evidence shows that Iamblichus exercised quite some influence on later

Neoplatonists in two main domains. First, in the field of exegesis Iamblichus fully developed the doctrine already maintained by Porphyry, that each work of a classical philosopher has an intended subject matter (*skopos*), which gives coherence and unity to the whole work. Second, Iamblichus' theory about the structure of intelligible realm and the status of gods therein, as well as his interpretation of Chaldean theology, were influential. Proclus' complex metaphysics may well have been inspired by him (Dillon 1987: 883–884).

Philosophy: First Principles

Like Porphyry, Iamblichus develops Plotinus' philosophy, yet he draws on the Pythagorean tradition more extensively than Porphyry does. Like Moderatus and Numenius, Iamblichus considers Plato to be a Pythagorean, and for this reason he attributes to Plato several ideas which are advanced in Neopythagorean literature. He may have initiated the distinction, found in later Neoplatonism but not in Plotinus, between a triad of entities for each level of intelligible being, namely (a) a hypostasis as such, (b) the hypostasis as participated in by the lower level of being, and (c) the hypostasis as existing in the lower level of being. Iamblichus apparently maintained that "every order is presided over by the unparticipated monad, prior to the participated entities" (*in Tim.* fr. 54.60 Dillon), thereby multiplying the entities of the intelligible realm. His motivation for such innovations was apparently twofold: first, to establish continuity between the levels of being and, second, to solve the problem of how an intelligible principle can be the source of a lower one while remaining different from it.

At the level of the first principle, Iamblichus distinguishes between the completely transcendent Ones and that which is unconnected to the first triad of intelligibles and governs Limit and Unlimited (Damascius *On Principles* I.86.3–7, I.103.7–22. Damascius, who seems to be agreeing with Iamblichus on this issue, does not tell us on what grounds Iamblichus takes this view. Neither does Iamblichus himself when, while talking about the ancient Egyptian wisdom, he distinguishes two gods, presumably alluding to the distinction between two first principles (*On Mysteries* 8.2). One plausible interpretation (Dillon 1987: 881) is that Iamblichus, like Prophyry, sees a difficulty in the notion of the first principle as presented in Plotinus, namely that such a principle is at once absolutely transcendent and at the same time the cause of everything that comes into being, and postulates an intermediary One. It is not entirely clear how the level of the One is to be filled out. Presumably below the Monad, Iamblichus postulated the One Being (*hen on*), a further entity mediating between the One and the Intellect and connecting the One with being (Damascius *On Principles* I.101.3–102.5; for a reconstruction see Dillon 1987: 881–883).

In the realm of Intellect, or the intelligible realm, Iamblichus seems to distinguish three aspects again, namely: Being, Life, and Intellect, which he considers to be three entities. The reason for that distinction is again that the Intellect exists both in itself and also at the level of informing lower entities. Iamblichus apparently distinguished between a higher level of Intellect, or pure intelligence, which he identified with Being and at which no thinking takes place, a middle level which is identified with the objects of thought, the Forms themselves, and a lower level at which thinking of the Forms takes place (Damascius *in Phil.* 105, p. 49–51 Westerink; *in Phil.* fr. 4 Dillon). It is certain, though, that Iamblichus identifies the entire realm of Intellect with the craftsman of the *Timaeus* (Proclus *in Tim.* 1.307.19–25; *in Tim.* fr. 34 Dillon; see Deuse 1981: 260–68, Dillon 1987: 889 – 90). This becomes plain in the following passage.

> After this [interpreter; sc. Porphyry] we come to the divine Iamblichus, who wrote at great length against the opinion of Porphyry, condemning it as not being Plotinian. As for his own own teaching, in his doctrine of the gods he names the entire intelligible cosmos the demiurge, as is clear from his own words, in which he expresses himself in the same terms as Plotinus … "True essential being (*ousia*) and principle of the things that come into being and the intelligible paradigms of the cosmos, which we call 'intelligible cosmos', and all those causes we hold to pre-exist in all natural entities, declare to pre-exist, all of these the demiurge god whom we are now seeking has gathered together in unity and holds within himself."
>
> (Proclus *in Tim.* 1.307.19–25; trans. Runia and Share modified)

The passage conveys two important messages, first that the craftsman is the source of intelligibility and second that the craftsman is the principle of all created entities. The Intellect, in the second of its three aspects mentioned above, is participated by the Soul. In reaction to Porphyry, Iamblichus distinguishes the Soul sharply from the Intellect (*On the soul* in Stobaeus 1.365.5–366.5), and considers it the principle of division (*merismos*) of the Forms in the world and also the principle of all souls, including the world-soul (Iamblichus in *Tim.* frs. 54, 63 Dillon).

Iamblichus' theory of individual souls is amply expounded in the fragments of his work *On the soul* (see Finamore and Dillon 2002, Steel 1978, Shaw 1995: chs. 3–4). Iamblichus maintains that the human soul is an intermediary between intellect and body. What is peculiar to Iamblichus is his claim that the human soul has a double nature, intellectual but also irrational, the second of which is also present in the soul of animals. To understand this, we must bear in mind that Iamblichus distinguishes different kinds or classes of souls, such as divine souls, human souls, and souls of animals (*On the soul* in Stobaeus 1.372.15–374.8). This seems to be an elaboration of Numenius' distinction between souls of rational and irrational animals, explicitly mentioned by Iamblichus (ibid., Numenius fr. 41 Des Places; see Finamore and Dillon 2002: 134). Iamblichus, however, goes further, maintaining that, unlike divine souls, which are always engaged in intellectual activities, and animal souls, which are exclusively engaged in activities motivated by their animal nature, human souls combine both rational and irrational aspects simultaneously and permanently (Pseudo-Simplicius *in De anima* 89.36–90.7). Iamblichus in a way asserts the distinctly human character of human soul, which has to do with its embodied condition. His doctrine is at variance, though, with that of Plotinus and Porphyry, according to which the human soul is essentially an intellect that never fully descends to the body. Accordingly, Iamblichus denies that the human soul develops rational and irrational faculties in order to actualize the body, as Porphyry claimed (frs. 251–5 Smith), holding instead that these powers constitute the soul's substance (*On the soul* in Stobaeus 1.367.11–14).

Given how Iamblichus differs from Plotinus and Porphyry on the nature of human soul, he also differs on its fortune, maintaining that the soul should not always abide in the intellectual realm but must also descend, as the *Timaeus* suggests, in order to fulfill one aspect of its nature (*On the soul* in Stobaeus 1.378.18–379.10; Finamore and Dillon 2002: 153–6). This does not mean that the soul must remain there. On the contrary, Iamblichus has an entire theory about how the soul can ascend to the intellectual realm.

While for Plotinus and Porphyry the soul can ascend and thus become assimilated to the divine only through intellectual contemplation, Iamblichus maintains that there is

an alternative path, the practice of certain rituals. This is Iamblichus' theory of theurgy (*theourgia*), which became a subject of controversy between him and Porphyry. Against Porphyry, who upheld that man can attain deification through philosophy (*On Abstinence* 2.49.12), Iamblichus argues in the persona of Abamon, an Egyptian priest, that the soul cannot join to the divine through the capacity of thought alone (*On Mysteries* 1.3.9); rather, he claims, the soul has to be purified through practices such as prayer, sacrifice, and ritual use of material objects (Dillon 1987: 900–901). Once purified, the soul can ascend to, or be united with, the gods (*in Phaedrum* fr. 6 Dillon). Both this unification as well as the theurgic practices by which it takes place are said to be beyond linguistic description (*On Mysteries* 2.11.96–7, 5.26.230–33).

Iamblichus' theory is based on elements that can be traced back to earlier philosophers, such as the view that everything there is in the cosmos is permeated by gods (Remes 2008: 172–3). Iamblichus takes the unprecedented step of setting limits to what philosophy can achieve, however, and he separates philosophical and theurgical method of inquiry (*On Mysteries* 2.11.96). Such a position has been seen as a turn to the irrational, one that undermines human reason and this is to some extent true. Still, Iamblichus does not see the theurgical level as that of the irrational but rather as the one that transcends reason (Proclus *in Tim.* 3.356.6–17, Taormina 1999: 148–159). Moreover, he uses argument in order to establish his position about theurgy (Smith 1993: 78), and he aims for consistency between his view about the ontological status of the soul and its fortune. This consistency is confirmed by his ethical views.

Ethics

Iamblichus shares with Plotinus and Porphyry the view that the goal of human life, happiness, can be achieved only when we realize our intellectual nature and live in accordance with it (*Letter to Macedonius On Fate* fr. 7; see Remes 2008: 180–81), and he claims that this is the goal of philosophy itself (*De com. math. sc.* 79.20–80.2). Iamblichus extends Porphyry's scheme of levels of virtue, which relies on Plotinus *Ennead* I.2. According to Olympiodorus' report at *in Phaed.* 113.14–114.25, Iamblichus distinguishes seven levels of virtue: natural, ethical, civic, purificatory, theoretical, paradigmatic, and hieratic. The first two levels of virtue, which are not included in Porphyry's scheme, are inspired by the *Politicus* (306a) and the *Laws* (807c, 963e) and possibly also by Aristotle's *Nicomachean Ethics*. The hieratic virtues, which are distinctly Iamblichean, are the virtues of the godlike part of the soul (*to theoeides tēs psychēs*), that is, they arise when the soul is assimilated to god. By placing them at the end of the list, Iamblichus indicates the superiority of theurgy over philosophy in achieving deification or likeness to god. Thus these additions constitute a substantial departure from the schemes of both Plotinus and Porphyry. In the *Protrepticus*, however, Iamblichus maintains that the likeness to God is achieved through knowledge (11.14–19 Pistelli), which suggests perhaps that he wavered on this issue.

Logic

Iamblichus' work on logic is evidenced in his commentaries on Aristotle's *Categories* and on *Prior Analytics*. The former was much used by his student, Dexippus (*in Cat.* 5.9–10), and by Simplicius (*in Cat.* 3.3–4), who preserves good evidence of it (in Larsen 1972). Simplicius gives an idea of Iamblichus' interpretative method in this commentary.

> After Porphyry, the divine Iamblichus also devoted a lengthy treatise to this book [i.e. the *Categories*]. For the most part, he followed Porphyry right down to the letter, but he picked out some things and articulated them in order to make them clearer. At the same time, he contracted the scholastic long-windedness Porphyry had used against the objections; and he applied his intellective theory (*noera theōria*) everywhere, to almost all of the chapter-headings.
>
> (Simplicius *in Cat.* 2.9–14 Busse; trans. M. Chase)

What does it mean to say that Iamblichus applied his intellective theory to the exegesis of the *Categories*? Iamblichus speaks about this theory in *On Mysteries* (1.2, 6.9). It is not clear, however, what the application of this theory to the *Categories* amounts to. Simplicius does not explain what he means either, but later in his commentary he says that the subject matter of this work is "words in so far as they are significant of beings. Instruction is … also given about the things (*pragmata*) signified by them and about notions (*noēmata*) in so far as things are signified by words" (*in Cat.* 13.12–15; trans. Chase modified). Simplicius, however, associates this view about the *Categories* not only with Iamblichus, but also with Alexander and Porphyry, who did not subscribe to such an interpretation (see Chiaradonna 2007a: 134–5). Yet immediately after the section cited above, Simplicius adds that Iamblichus' commentary on the *Categories* draws also on "Archytas' work *On the all* (*Peri tou pantos*)," that is, on the work of the Pythagorean Pseudo-Archytas *On the discourse about everything or on the ten categories*. Simplicius also tells us that Iamblichus tried to show Aristotle in agreement with Archytas (*in Cat.* 2.15–25). The Pythagorean treatise considers the Aristotelian categories as the basic index of logical entities, that is, entities pertaining to both language and thinking, through which we know the beings (*ta onta*; Pseudo-Archytas 32.10–14 Thesleff). Dexippus also shares this view (*in Cat.* 12.17–18). Such evidence suggests that Iamblichus took the *Categories* to be about the words and concepts through which we come to know the beings. This means that Iamblichus, unlike Porphyry and perhaps in reaction to him, considers the *Categories* not only as a work of logic but also of ontology (see Griffin 2012).

References and further reading

Primary sources

Porphyry

Isagoge et in Aristotelis Categorias commentarium, ed. A. Busse, Berlin 1887 (*CAG* IV.1).
Porphyre Commentaire aux Catégories d'Aristote, ed. R. Bodéüs, Paris 2008 (Vrin).
Die neuplatonische, fälschlich dem Galen zugeschriebene Schrift Pros Gauron peri tou pôs empsychoutai ta anthropina embrya, ed. K. Kalbfleisch, Berlin 1895.
Porphyrios, Kommentar zur Harmonielehre des Ptolemaios, ed. I. Düring, Göteborg 1932.
Porfirio: Lettera ad Anebo, ed. F. Sodano, Naples 1958: L'Arte di Tipografia.
Vita Plotini, in *Plotini Opera*, ed. P. Henry and H.-R.Schwyzer, vol. I, Oxford 1964 (OCT).
In Platonis Timaeum commentariorum fragmenta, ed. A. R. Sodano, Naples 1964 (Istituto della Stampa).
Sententiae ad intelligibilia ducentes, ed. E. Lamberz, Leipzig 1974 (Teubner).
Porphyre, De l'abstinence, ed. J. Bouffartique and M. Patillon, vols. I–IV, Paris 1977–1996 (Les Belles Lettres).
Porphyre Vie de Pythagore, Lettre à Marcella, ed. É. Des Places, Paris 1982 (Les Belles Lettres).
Porphyrius.Fragmenta, ed. A. Smith, Stuttgart, Leipzig 1993 (Teubner).

Iamblichus

Iamblichus Protrepticus, ed. H. Pistelli, Stuttgart, Leipzig 1888 (Teubner).
Iamblichus De Vita Pythagorica, ed. U. Klein, Stuttgart, Leipzig 1937 (Teubner).
Iamblichus De Mysteriis, ed. É. Des Places, Paris 1966 (Les Belles Lettres).
Iamblichus In Nicomachi Arithmeticam Introductionem, ed. H. Pistelli and U.Klein, Stuttgart 1975 (Teubner).
Iamblichus In Platonis Dialogos Commentariorum Fragmenta, ed. J. Dillon, Leiden 1973 (Brill, Philosophia Antiqua 23).
Iamblichus De Anima, ed. J. Finamore and J. Dillon, Leiden 2002 (Brill, Philosophia Antiqua 92).

Secondary literature

Barnes, J. (2003) *Porphyry Introduction*, Oxford: Oxford University Press.
Bechtle, G. (1999) *The Anonymous Commentary on Plato's "Parmenides,"* Bern, Stuttgart, Wien: Paul Haupt.
Beutler, R. (1953) "Porphyrios," in *RE* XXII 1, 275–313.
Bidez, J. (1913) *Vie de Porphyre, le philosophe néo-platonicien*, Ghent: E. Van Goethem.
Bidez, J. (1919) "Le philosophe Jamblique et son école," *Revue des Etudes Greques* 32: 29–40.
Brisson, L. (ed.) (2005) *Porphyre Sentences*, vols. I–II, Paris: Vrin.
Chase, M., (2010), "Porphyry on the Cognitive Process," *Ancient Philosophy* 30: 383–405.
Chase, M., (2012), "Porphyre de Tyr," in *Dictionnaire des Philosophes Antiques*, vol.Vb: 1344–1377.
Chiaradonna, R. (1998) "Essence et prédication chez Porphyre et Plotin," *Revue des sciences philosophiques et theologiques* 82: 577–606.
Chiaradonna, R. (2007a) "Porphyry and Iamblichus on Universals and Synonymous Predication," *Documenti e studi sulla tradizione filosofica medievale* 1: 123–140.
Chiaradonna, R. (2007b) "Porphyry's views on the immanent corporeals," in G. Karamanolis and A. Sheppard (ed.) *Studies on Porphyry*, London: Institute of Classical Studies (BICS supplement 98): 35–49.
Chiaradonna, R. (2008) "What is Porphyry's *Isagoge?*," *Documenti e studi sulla tradizione filosofica medievale* 19: 1–30.
Deuse, W. (1981) "Der Demiurg bei Porphyrios und Iamblich," in C. Zintzen (ed.) *Die Philosophie des Neuplatonismus*, Darmstadt: WissenschaftlicheBuchgesselschaft: 238–278.
Dillon, J., (1987) "Iamblichus of Chalcis," in W. Haase (ed.) *Aufstieg und Niedergang der römischen Welt* II, 36.2, Berlin and New York: de Gruyter: 862–909.
Dillon, J. (1992) "Porphyry's Doctrine of the One," in M.-O. Goulet-Cazé, G. Madec and D. O'Brien (eds.) *Sophies Maietores: hommage à Jean Pepin*, Paris: 356–366.
Dillon, J. (2007) "What Price the Father of the Noetic Triad? Some Thoughts on Porphyry's Doctrine of the First Principle," in G. Karamanolis and A. Sheppard (eds.) *Studies on Porphyry*, London: Institute of Classical Studies (BICSsupplement 98): 51–59.
Dillon, J. (2010) "Intellect and the One in Porphyry's *Sententiae*," *The International Journal of the Platonic Tradition* 4: 27–35.
Ebbesen, S. (1990) "Porphyry's legacy to logic: a reconstruction," in R. Sorabji (ed.) *Aristotle Transformed*, London: Duckworth: 141–171.
Finamore, J. F. (1985) *Iamblichus and the Theory of the Vehicle of the Soul*, Chico: Scholars Press.
Griffin, M. (2012) "What has Aristotelian Dialectic to offer a Neoplatonist? A possible sample of Iamblichus at Simplicius *On the Categories* 12.10–13.12," *International Journal of the Platonic Tradition* 6: 173–185.
Hadot, P. (1968) *Porphyre et Victorinus*, vols. I–II, Paris: Etudes Augustiniennes.
Heath, M. (2003) "Porphyry's Rhetoric," *Classical Quarterly* 53: 141–166.
Karamanolis, G. (2004) "Porphyry the first Platonist commentator of Aristotle" in P. Adamson, H. Baltussen and M. Stone (ed.), *Philosophy, Science and Exegesis in Greek, Arabic, and Latin Commentaries*, London: Institute of Classical Studies (BICS supplement): 97–120.
Karamanolis, G. (2006) *Plato and Aristotle in Agreement? Platonists on Aristotle from Antiochus to Porphyry*, Oxford: Oxford University Press.
Karamanolis, G. and Sheppard, A. (ed.) (2007) *Studies on Porphyry*, London: Institute of Classical Studies (BICS supplement 98).
Karamanolis, G. (2007) "Porphyry's notion of empsychia," in G. Karamanolis and A. Sheppard (eds.) (2007), *Studies on Porphyry*, London: Institute of Classical Studies (BICS supplement 98): 91–110.
Larsen, B. D. (1972) *Iamblique de Chalcis, Exégète et Philosophe*, vols. I–II, Aarhus: Universitetsforlaget.
Lloyd, A. (1990) *The Anatomy of Neoplatonism*, Oxford: Oxford University Press.

O'Meara, D. J. (1989) *Pythagoras Revived: Mathematics and Philosophy in Late Antiquity*, Oxford: Oxford University Press.
Remes, P. (2008) *Neoplatonism*, London: Duckworth.
Runia, D. T. and Share, M. (2008) *Proclus.Commentary on Plato's Timaeus. Vol 2, Book II: Proclus on the Causes of the Cosmos and its Creation*, Cambridge: Cambridge University Press.
Saffrey, H. D. (1992) "Pourquoi Porphyre a-t-il édité Plotin?," in L. Brisson et. al. (eds.) *Porphyre, La vie de Plotin*, Paris: Vrin: 31–69.
Shaw, G. (1995) *Theurgy and the Soul: The Neoplatonism of Iamblichus*, Pennsylvania: Penn State University Press.
Smith, A. (1974) *Porphyry's Place in the Neoplatonist Tradition*, The Hague: Martinus Nijhoff.
Smith, A. (1987) "Porphyrian Studies since 1913," in W. Haase (ed.) *Aufstieg und Niedergang der römischen Welt*, Berlin and New York: de Gruyter: 717–773.
Smith, A. (1993) "Iamblichus' Views on the Relationship of Philosophy to Religion in *De Mysteriis*," in H. J. Blumenthal and E. G. Clark (eds.) *The Divine Iamblichus. Philosopher and Man of Gods*, London: Bristol Classical Press: 74–86.
Steel, C. (1978) *The Changing Self. A Study on the Soul in Later Neoplatonism: Iamblichus, Damascius, and Priscianus*, Brussels: Paleis der Academien.
Strange, S. (1987) "Plotinus, Porphyry, and the Neoplatonic Intepretation of the *Categories*" in W. Haase (ed.), *Aufstieg und Niedergang der römischen Welt* II, 36.2, Berlin and New York: de Gruyter: 955–974.
Strange, S. (2007) "Porphyry and Plotinus' Metaphysics," in G. Karamanolis and A. Sheppard (eds.) *Studies on Porphyry*, London: Institute of Classical Studies (BICS supplement 98): 17–34.
Thesleff, H. (1965) *The Pythagorean Texts of the Hellenistic Period*, Åbo: Åbo Akademi.
Taormina, D. (1999), *Jamblique critique de Plotin et de Porphyre*, Paris: Vrin.

Related chapters

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44
SYRIANUS, PROCLUS, AND DAMASCIUS

Jan Opsomer

Of the philosophers who presided over the Platonic Academy in its final phase, Syrianus, Proclus, and Damascius are certainly the ones who stand out. Much earlier, Plotinus had laid the foundations of the Neoplatonic system with his theory of the hypostases, based on the three principles of the One, Intellect, and Soul. Since Plotinus the number of hypostases had proliferated, through what one can understand as an inner differentiation of the levels of Intellect (now the realm of the Intelligible, with Intellect at its lower border) and Soul. The reasons for this development were partly systemic, partly exegetical: new logical principles were applied to structure the Platonic system, for instance the law of intermediaries specifying that no two successive ontological levels can be disjunct: they always have to have a property in common. Of increasing importance, however, was the exegetical aspect: the texts of Plato, but also other sources such as the *Chaldean Oracles*, were held to contain revelations of divine truths, extractable through close reading and sophisticated hermeneutical techniques. On many philosophical issues Syrianus established the standard late Athenian interpretation; Proclus, his disciple, built on the work of his master and expanded it (cf. Marinus *Life of Proclus* 23, 18.1–7). In his writings we find late Athenian Platonism spelled out in its most systematic form. Damascius' work can be read as an aporetic commentary on Proclus' thought. Here, we will study the relation between these three philosophers by looking at their discussion of the first, ineffable principle, the existence of which all later Platonists accept. Despite the fact that they think one cannot really assert anything about it, they write extensively on it and Damascius even fundamentally disagrees with his predecessors. We will first look at an argument that is presented as purely systematic, and then at arguments that start from an exegesis of Plato's *Parmenides*.

Syrianus (head of the school in 431/2, died before 439) is best known for his commentary on parts of Aristotle's *Metaphysics* (cf. Frede 2009), the only surviving text that can be attributed with certainty to him. He may also be the author of a commentary on the rhetorician Hermogenes. We know that Syrianus lectured on Platonic dialogues (a commentary on the *Phaedrus* based on lecture notes taken by Hermias survives) on Aristotle, the *Chaldean oracles* and Orphic texts. For present purposes, however, the testimonies found in Proclus' commentaries on the *Timaeus* and the *Parmenides* constitute the most important source.

Soon after the death of Syrianus, Proclus (412–485 AD) took over the headship of the school. He was a prolific writer (cf. Steel 2010: 634–37; Helmig and Steel 2011) and

we can still read several of his commentaries on Plato, besides the already mentioned incomplete commentaries on the *Timaeus* and the *Parmenides*: a collection of essays, on the *Republic*; commentaries on the *Alcibiades* I; and notes on the *Cratylus*. He wrote other commentaries on Plato and Aristotle, which have not been preserved. A commentary on the first book of Euclid's *Elements* is also extant. Proclus is moreover the author of systematic works, the most important of which are certainly the *Elements of Theology* (*ET*) and the *Platonic Theology* (*TP*). Other works of interest are the *Tria opuscula* on providence and evil, the *Elements of Physics* and the *Hypotyposis astronomicarum positionum*, a critical summary of astronomical knowledge of his time, based on Ptolemy's *Syntaxis*.

Damascius (c. 462–after 538) was scholarch when, in 529, Justinian ordered the Academy to be closed. The exact course of the ensuing events is disputed, but there was certainly a temporary exile of the Platonists from Athens. Most of Damascius' works are lost. The surviving works consist of the *Vita Isodori* (a biography of his teacher) commentaries on the *Phaedo*, the *Philebus*, and the *Parmenides*, and a systematic work *Difficulties and Solutions concerning First Principles*, more commonly known as *On First Principles* (see Van Riel 2010).

An argument from scratch

With the first propositions of his most systematic treatise, *The Elements of Theology*, Proclus purports to offer an argument for the existence of a first principle, the One, without appealing to accepted doctrines or authorities, making as few assumptions as possible. This method is characteristic of the genre of *Stoicheiōseis*, which is modeled on the expository method adopted by mathematicians, as Proclus explains in the commentary on Euclid's *Stoicheia* (= *Elements*). It is obviously chosen for its didactic merits (*in Eucl.* 71.22–75.4). *ET* consists of propositions and demonstrations: the later propositions and proofs build on the preceding ones. A close consideration of this first proposition and the argument for it will exemplify the kind of philosophical strategy to be found in the work and the highly abstract dialectical nature of his argumentative procedure. The work starts with a series of propositions on *(to) hen*. Depending on the context one may translate this expression as "(the) one," "unity" or even "unit."

The first proposition states that

> Prop. 1: Every plurality participates in some way in *to hen*.

Although the argument supposedly does not appeal to any presuppositions, Proclus relies on the reader's familiarity with certain primitive terms and expressions, such as "one," "infinite" ("unlimited") "participation." He does not define these terms, yet their introduction is not innocent, as we shall see. He avoids speaking about parts and wholes (he will discuss these terms later on) though he clearly treats the constituents of a plurality as its proper parts. The term here translated as plurality (*plēthos*) is used in a vague and common sense for anything of some unspecified size or number, something that is quantitatively large (Hathaway 1982: 125).

This proposition (which is not without precedents: see Plot. *Enn.* V 6 [24] 3.2–3; 13–21; VI 9 [9] 1) is neither restricted to the empirical world (as suggested by Dodds 1963: 187) nor to abstract entities, but may very well be applied to either of them or to any conceivable group of things. A translation of *to hen* as "*the* one" would create the

wrong impression that Proclus in this argument already accepts the existence of the One as a supreme metaphysical principle. He does not, however: he rather wants to prove its existence. The expression can also stand for something that has the character of being one, that is, a simple, and that is what is meant here, as becomes clear from the ensuing demonstration. *To hen*, then, does not here function as a number with a cardinality, but as an adjective denoting the property of not having any parts, spatial or otherwise. ("Part" is understood as "proper part"; see Frege 1950: §29 for the adjectival use of "Einheit," denoting a lack of internal divisions which makes it possible to conceive of something as a distinct thing.) Strictly speaking, it is not even always a property, Proclus would say, since that would imply a distinction between the property and the thing in which the property inheres. In the case of pure simplicity, such a distinction would not be possible. Be that as it may, "one" expresses what it is to be simple. Proclus' claim, then, is that every plurality shares in the property of being simple, that is, partless.

The proof is a *reductio ad impossibile*: from the assumption of the contradictory of the proposition an impossible consequence is derived. Assuming that not all plurality partakes of unity, let there be a plurality that does not. If the consequence is an impossibility, the assumption must be wrong. What Proclus means by "not participating in *to hen*," becomes clear from the proof: in case something does not participate in *to hen* at all, it can in no way whatsoever be called *hen*, which is taken to entail that nothing about it, that is, none of its components, can be called thus. If a plurality does not in any way partake of *to hen*, it will itself not be *hen*, that is, it will not constitute a unified whole; nor will any of its supposed components be one. Each of the components will in turn be a plurality, and each of those component pluralities will again be a plurality, and this *ad infinitum*.It is indeed assumed in the argument that no plurality has any share of unity. The intermediate conclusion is that a plurality not participating of *to hen* consists of an *infinity* of components. Now, not only immediate constituents, but also constituents of constituents count as "that of which something is made." Then, however, each of the infinite number of components will again consist of an infinity of components. Therefore the original plurality consists of infinite times infinite components (*ET* 1, 2.2–5). Is this possible? Any of the many things which make up a plurality at whatever level will be *hen* or not *hen*, and then either nothing or many. *Ex hypothesi* for every single constituent, however, it is the case that it is not *hen*. It is not nothing either, however, for then the sum total of all constituents is nothing, and that contradicts our original assumption of an *existing* plurality (Proclus' argument seems to require that *not all* components are nothing, but in fact he argues that *none* of them are nothing, based on the intuition that that which is not cannot be a constituent). Hence each component, at each and every level of composition, is composed of many things, each of which in turn consists of many things, none of which is nothing. Hence the plurality consists of an actual infinity of infinities, and that is impossible. Proclus explains why this is so (this is more extensively argued in *TP* 2.1, 5, 17–25): a whole is always greater than any proper part (cf. Euclid *El.*1, C.N. 8; Proclus takes this to be an indemonstrable axiom to be assumed in any science: *in Eucl.*196.1–14, 17–18; nowadays the principle would rather be regarded as a postulate foundational for a particular theory). If the part is already infinite, however, then the whole must be greater than the part (what is more, since it consists in an *infinity* of infinite constituents, it would be infinitely many times greater). Nothing can exceed infinity, however.

This argument may not be very convincing to the reader versed in set theory: nowadays mathematicians reject the assumption that the whole must be greater than any of

its proper parts, and accept infinities with different cardinalities (as a matter of fact, "infinitely times infinite" has just the cardinality of the set of natural numbers). Yet Proclus is not simply making a—from our perspective wrong-headed—mathematical point about infinities. His point is rather that one cannot make sense of the notion of plurality if one does not start from the notion of "units" that together make up the plurality. Thinking about something as a unit means conceiving it as *hen*. Moreover, the argument is not so much about the conceivability of things, but about what they are. Thus the idea is that the reality of any plurality implies the existence of units (Schmitz 2002: 463). These, so Proclus thinks, could not consist of infinitely many parts. The ultimate constituents of any plurality therefore need to be atomic.

A set-theoretical analysis of Proclus thus runs into the difficulty that Proclus discusses the condition that logically precedes the existence of any set. Any set theory uses the notion of elements, which are "units," that is, constituents of a plurality that are not themselves pluralities-without-unity; the fact that they are elements or are capable of being regarded as such implies that they already partake of some kind of unity (even so Proclus is wrong in thinking that the alternative—a plurality consisting of elements that are themselves pluralities and this *ad infinitum*—is inconceivable; cf. Oppy 2006: 202–03). An important difference consists in the fact that Proclus does not want to talk about conceivable sets of conceivable elements, arbitrarily grouped together, but about real pluralities, forming a real whole and consisting of elements that are true unities. Then the force of the proposition consists in the claim that everything that exists is either simple or (ultimately) composed without remainder from simples. Proclus' notion of a plurality differs in other important ways from sets: there is no such thing as a zero-plurality, as that is for Proclus no plurality at all but just nothing; and in speaking about pluralities and their constituents, he does not distinguish between items that are elements and others that are sub-sets. Despite the admitted differences from set theory (Brumbaugh 1982) Hathaway (1982: 125, 130) argues that one may use set theory to show why Proclus' argument fails. Indeed if some sets count as Proclean pluralities, and if some of these contain infinitely many infinities, then some pluralities contain infinitely many infinities.

Granting proposition 1, for the sake of the argument, we now turn to propositions 2 and 3, which tell us more about pluralities and the different ways in which they are one.

Prop. 2: All that participates in *to hen* is both *hen* and not *hen*.

Prop. 3: All that becomes *hen* becomes *hen* by participation in *to hen*.

One might think that just as pluralities need *to hen*, *to hen* needs plurality. In that case, one and many would be interdependent. Proclus denies this. He explains his reasons using the (undefined) notion of participation. This concept is of course well-known to Platonists. Something can be F only if it participates in F-ness. So: something can be one only if it participates in unity. The participation in some form of unity makes the participant one. Hence the property derives from "the participated" (the transitive use of this verb is defended by Dodds 1963: 3 n.1). Proclus begins the argument in support of proposition 2 by making a contrast between the *hen-itself* (*to autohen*) that is, that which is nothing but one, and that which participates in the former but is also something other than it (for example, a horse). The participants have unity as an affect and in this sense

"become" one (this verb does not necessarily have a temporal sense in this context). Since they are not just one, but also something besides that, they are one and not one, that is, they are plural (Damascius *Princ.* 3.168.11–16, defines the term and explains that when something participates in F, it is [a] not identical with F and [b] secondary to F; see also Procl. *in Prm.* 6.1078.21–1079.1). The third proposition makes the point that there is no other way for anything other than *to autohen* to become *hen* than through participation. Every being that is somehow one owes its unity to *to hen* in which it participates. Proclus does not yet claim that the latter *hen* is already the *autohen*, but merely that things do not become one simply by being together, but rather by receiving unity from something outside, that is, from some existing *hen*.

Prop. 4: All that is unified is different from *to autohen*.

The unified, that is, that which has become one, is different from the one-itself. The demonstration throws some light on the concept *autohen*. What is unified participates in the one, and hence is different from it. Participation implies non-identity, as is shown by Proclus' argument:

(i) The participant in *hen* is both *hen* and not *hen* (cf. §3).
(ii) *To autohen* is not both *hen* and not *hen*.
(iii) Hence the participant is not identical with *to autohen*.

There is an interesting sub-argument in support of (ii) by *reductio ad impossibile*: suppose the *hen*-itself is both *hen* and not *hen*. Then *to hen* in the *hen*-itself is again *hen* and not-*hen*, and this *ad infinitum*. In other words, it is possible to analyze each *hen* into two components, one of which is another *hen*, one level deeper. Any *hen* is evidently different from *to hen* in which it is contained, as the latter is always the former plus something other. The argument further presupposes that none of the earlier *hena* get recycled. This gives us an allegedly vicious regress, which can be avoided only by invoking a true *autohen*, that is, a one-itself which is nothing other besides that. So it turns out that the *autohen* which is the object of the *reductio* was not an *autohen* after all, but clearly we need one. Any plurality needs to be unified through participation in some *hen* and, on pain of an infinite chain, there has to be a *hen* that is nothing but *hen*, that is, that contains nothing other and is thus free from plurality (something that does not *possess* the property of unity, but *is* unity). This is the first time Proclus argues for the existence of an *autohen*, rather than just appealing to the concept (as he did in §3). We will see shortly why *to autohen* needs to be unique.

Prop. 5: Every plurality is second to *to hen*.

Since he has purportedly shown the existence of something that is purely one, Proclus now makes the further claim that this *autohen* is prior to all plurality (cf. Plot. *Enn.* V 4 [7], 1.1–23). That the claim pertains to the one-itself, and not to derivative unities becomes clear from the argument (there is nothing wrong with particular derivative unities being posterior to particular pluralities). Proclus devises his proof by rejecting (i) there is a plurality prior to *to hen*, and (ii) there is a plurality on a par with *to hen*, to conclude (iii): *to hen* is prior to all pluralities. The concept of ontological priority is introduced without explanation. The argument further relies on the tacit assumption

that if X participates in Y, X is posterior to Y. This is not self-evident: one could easily envisage a model that allows mutual participation, and interestingly Proclus will further on consider this possibility, for the sake of the argument, although he rules it out here.

(i) The possibility of a plurality preceding unity is rejected on the basis of proposition 1: such a plurality would not participate in the one, as it cannot participate in what is not yet there (again it is not necessary to understand this as a temporal statement: an ontological reading is called for; cf. the remark at *ET* p. 4.28, concerning the second part of the argument) but we have seen that a plurality completely devoid of *to hen* cannot exist. (ii) Plurality cannot be level with the (first) one, for it neither precedes the other, neither participates in the other. That means that *to hen* has no plurality and plurality is devoid of *to hen*. Since the latter is impossible, this option is rejected as well, for exactly the same reason as the first possibility. The third possibility (iii) divides into two further possibilities. So far Proclus has established that plurality needs to participate in *to hen*.Therefore the logical conclusion, based on the assumptions made earlier on, would seem to be that plurality is posterior, so that *to hen*, at least the first *hen*, is at the level where there is not yet any plurality. If there were, this *hen* would not be truly one. Hence Proclus concludes (iii.a) that *if* the One does not participate in plurality, plurality is in every way posterior to it. *QED*.

Yet surprisingly Proclus formulates what could have been his final conclusion in the hypothetical mode and as first part of an exclusive disjunction. He has done so because he wants to make a further point. For now he examines what happens (iii.b) if *to hen* participates in plurality, just as plurality participates in *to hen*. By this surprising turn it becomes clear that (ii) was intended not so much as the possibility of oneness and plurality simply coexisting, but rather as addressing the possibility of a plurality *not preceded* by a *hen*. Under (iii.b) *to hen* is in some way also plural. How can a pluralized one coexist with a plurality-partaking-of-unity? If they are together, Proclus argues, either they come together of their own accord, or something other brings them together. Things contrary to one another, however, do not communicate in each other spontaneously. Since one, as such, and many, as such, are opposites, they would remain separate. Hence, since according to (iii.b) the plural becomes one and the one plural, there must be something other that forces them into this union. This third instance must be prior to them and, as its effect is union, must be itself *hen*.It becomes clear that *to hen* of the protasis of (iii.b) cannot be an *autohen*: it is a pluralized *hen* that requires a higher *hen* to make it accept its communication with plurality. This higher *hen* is the *autohen* of (iii.a) transcending plurality completely. Thus every plurality, including *to hen* of (iii.b) minimal as its share in plurality may be, is posterior to *to autohen*. So by distinguishing two cases within (iii) Proclus has shown that there are at least two levels of unity, and that an existence of a pure, highest unity is requisite. The relation between one and the many is therefore not symmetrical: plurality needs the one, but not the other way around. This analysis allows us to reject another possibility, not mentioned by Proclus. In the previous propositions he had merely shown that each plurality needs a one, and that we need an *autohen* in order to avoid a regress. He has not explicitly argued, however, that there is only one such *autohen*. One might after all think that we could invoke a different *autohen* each time we need to stop a regress. The problem with that, however, is that if there were two *autohena*, they would form a plurality and would need a higher *hen* to make sure they and the pluralities over which they preside would not constitute completely disjunct realities.

Having distinguished two levels of unity, Proclus goes on in the next proposition (§6) to make further distinctions. The first participants in the one-itself are called

henads. They are higher than the mere unifieds. Hence the first pluralities will consist in groups of henads. Groups composed of unifieds come later. This is because the first constituents of a plurality cannot be themselves pluralities, as this would again lead to a regress. Hence one needs entities that are simpler than a unified plurality, yet cannot be the unique one-itself. Their only plurality consists in that there are more than one of them. Proclus' interpretation of Plato's *Parmenides* will shed some further light on these henads.

Proclus' argument in the first propositions of *ET* has purported to show the existence of exactly one one-itself on which all plurality depends. Plurality depends on *to autohen* for its unity, without which it would dissipate into nothingness: that is the idea. The argument is circular, as it *assumes* that a plurality can only be unified by a one that is external and prior to it, which is also what it wants to prove.

The fundamental assumption, that plurality presupposes oneness, but that it is possible to conceive of something that is one without being anything else, has something going for it. Yet does it make sense to say that something is one, without saying *of what* it is a unity? The notion of oneness has been denatured beyond anything to which we usually attach the predicate "one" or "unitary." That is exactly what these Platonists admit, however: the absolute "One" is beyond our intellectual grasp, although we have an inkling about what it might be. Proclus has offered an argument that purports to demonstrate the existence of the One without relying on any doctrines or authorities. In fact, such an undertaking is probably hopeless, however, as the many problems with it and the tacit assumptions show. Possibly we should understand this text more as an elucidation of concepts than as a rigorous proof.

Some readers may take the argument as a proof for the existence of god, that is, of the One that is the supreme theological principle (thus, for instance, Nicholas of Methone, who treated it as an attack on the Christian trinitarian dogma: *Refutation of Proclus* 4.3–10.20). Its place at the beginning of *ET* and the parallel argument in *TP* 2.1 certainly suggest such a role. Yet so far Proclus has not mentioned any divine attributes. He has not said anything about the divinity of "the marvel of the One, which is not being," as Plotinus calls it (*Enn.* VI 9 [9] 5.30); of its being identical with the good; about its being the cause of everything that exists; about its supposedly being the unhypothetical principle of all things and the anchor point of the highest science mentioned by Plato at *Republic* 501b6–7. In the later parts of the work Proclus partly argues (for example, prop. 11: "All beings proceed from a single cause, the first") partly assumes these things. The natural question to ask is how *to hen* can be all of these things without losing its absolute simplicity? This question is addressed most fully in Proclus' *Commentary on the Parmenides*, where he sets out the (quasi)attributes of the One, this time relying on the authority of Plato. Plato was indeed held to have revealed divine truths, using a dialectical, that is, "scientific" expository method (Steel 2000: 373–79). The *Parmenides*, says Proclus, is a theological hymn addressed to the One (*in Prm.* 7.1191.25–7).

The *Parmenides* as interpreted by Proclus and Syrianus

Our three Platonists read Plato's *Parmenides* as a theological treatise (see Steel 2002). Its second part consists of a number of "hypotheses" about *to hen*: eight according to most modern interpreters, nine according to Syrianus and Proclus (*in Prm.* 6.1053.29–30; 1061.17–1064.11). For the sake of convenience we adopt the nine-fold division. The first five hypotheses assume that the One exists, and examine the consequences for the

One and for all other things, the four others assume that it does not exist, and again examine the consequences for the One (paradoxically) and for the other things. In each case a series of negations is followed by affirmations. This gives us eight hypotheses, which become nine if we add one in which affirmations and negations are combined (the term "hypothesis" here refers to a specific combination of an assumption with a series of conclusions; as explained at *in Prm.* 6.1052.11–23):

1. If *to hen* is
    - 1.1. consequences for *to hen*
        - 1.1.1. negations — *1. hypothesis*
        - 1.1.2. affirmations — *2. hypothesis*
        - 1.1.3. affirmations and negations — *3. hypothesis*
    - 1.2. consequences for the other things
        - 1.2.1. affirmations — *4. hypothesis*
        - 1.2.2. negations — *5. hypothesis*
2. If *to hen* is not
    - 2.1. consequences for *to hen*
        - 2.1.1. affirmations — *6. hypothesis*
        - 2.1.2. negations — *7. hypothesis*
    - 2.2. consequences for the other things
        - 2.2.1. affirmations — *8. hypothesis*
        - 2.2.2. negations — *9. hypothesis*

The extant part of Proclus' commentary contains his interpretation of the first hypothesis (see *in Prm.* 6.1041.1–17 for a survey of the nine hypotheses). Proclus is not tired of repeating (for example, 5.1033.17–1024.29; 6.1085.11–15; *TP* 1.10, 44.5–6; cf. Steel 2009: 201–5) that Syrianus solved the main exegetical difficulties and showed the way to the truth. Syrianus established that Plato did not discuss "god and the gods" in the first hypothesis, but only the first god, that is, the very first *hen* (from here onwards I use "*hen*" without specifying it is the *autohen*; for the equation One = God, see 6.1096.20–3). In this hypothesis a series of attributes are negated of *to hen*. The same attributes are ascribed to it in the second hypothesis. How this is possible can be explained by taking the conditional phrase "if the one exists/is" (*ei to hen esti*) in two different ways: one can put the emphasis either on "the one" (*to hen*) as in the first hypothesis; or on "is" *esti*, as in the second. Accordingly Syrianus and Proclus think the second hypothesis is not about the first *hen*, but about the One-Being, *to hen on*, the level of being posterior to the One (that is, the level of Plotinus' *Nous* and, more precisely, the Intelligible). By assigning different senses to *to hen* in the first and second hypothesis, Syrianus and Proclus avoid a violation of the principle of non-contradiction (*in Prm.* 6.1041.4–8; Steel 2004: 590). The very predicates that are attributable to Being, can only be denied of the One-itself. Proclus (*in Prm.* 6.1061.17–1063.1) praises Syrianus for having been the first to have taken into account the fact that the order of the attributes is the same in the first and the second hypothesis, even though there is one exception and the second

hypothesis lists more attributes (Van Campe 2009: 275–79). This observation led Syrianus to the assumption that the order of the attributes is itself significant: it reveals the hierarchy of gods, or, in other words, the complex system of hypostases, each attribute denoting a level of intelligible reality. We just give the beginning of the list (Steel 2000: 398 offers a survey):

One-Being	first intelligible triad
Wholeness	second intelligible triad
Plurality	third intelligible triad
Many	first intelligible–intellective triad

To give an idea of the overall structure of the "spiritual realm": three intelligible triads are followed by three intelligible–intellective triads and an intellective hebdomad. Then follow the gods that are more closely related to the world: hypercosmic, hypercosmic–encosmic, and encosmic gods; universal souls; angels/heroes/demons (see Dillon 2009).

The predicates attributed to One-Being represent different ways of being one, in descending order. This is the core idea of the doctrine of henads in the specific form it received in late Athenian Platonism. Being, supposedly the subject of the second hypothesis, displays different forms of unity, that is, participates of one-ness in different ways. This is taken to mean that it participates in different *hena*. These *hena* are called "one-nesses" or *henads*, representing different ways of being "one" (more precisely they are self-complete henads, that is, henads in the strictest sense: cf. *in Prm.* 6.1062.27; *ET* 114). As they are that in which Being participates, they are themselves above Being. Accordingly they are characterized by perfect simplicity, just like *to hen* (*ET* 115). They differ from *to hen*, however, not only by there being more than just one of them, but also by being *participated* tokens of unity. *To hen* is indeed so aloof from other things that it does not even support any relation to others. To use a terminology alien to the ancients: *to hen* has no intrinsic relations, as that would import plurality into it; but that does not exclude its having extrinsic relations: the Platonists indeed admit that other things have a relation to the One, a relation that is intrinsic *to them* (one could also describe the One's external relations as Cambridge properties, as Bussanich 1996: 45 does for the One in Plotinus). Henads, on the contrary, are by definition participated (cf. *ET* 24 for the theory of participation and *ET* 113–9 for the henads). Hence the simplicity of the henads is after all less perfect than that of *to hen*. Nonetheless, henads are likewise unknowable in themselves. The character of each of them and their order only become manifest in the classes of Being depending on them (*TP* 1.4, 20.20–5).

The negations in the first hypothesis are "seized from the properties of being" (*in Prm.* 6.1086.11) and the corresponding affirmations characterize Being in the second hypothesis. More precisely, they characterize Being at the highest level, the "monad of Being" or One-Being, where there is a full identity between one-ness and "being." This is a level that, in late Athenian Platonism, precedes the levels of Life and Intellect, and is regarded as identical with the Intelligible (as a matter of fact, the triad Being–Life–Intellect constitutes the structure of the entire realm corresponding to Plotinus' Intellect, but is recognizable at almost every sub-level of reality). According to a metaphysical law first expressed by Iamblichus, the highest causes have the widest range of effects (cf. Olymp. *in Alc.* 109.18–111.2). That is why living beings (beings participating in Life) are a subset of all beings (beings participating in the One-Being)

and intelligent beings (beings participating in intellect) are a subset of living beings. Thus the One-Being is the cause of beings at all levels of reality, and their unity is due to the henads "secretly present" in the One-Being and manifestly present each at their level of reality (the henads or gods in the strict sense do not constitute a hypostasis of their own, but are rather the divine, "super-essential" causes of the different hypostases). Thus the attributes of the second hypothesis supposedly characterize the different levels of being. According to Syrianus' interpretation of the *Metaphysics*, this was also what Aristotle had in mind when he wrote about first philosophy dealing with being-qua-being and its essential attributes (*in Metaph.* 45.29–31; cf. *Metaph.* Γ. 1, 1003a21; a29–32; Γ. 2, 1004a26; b28; 1005a17–18). The science of intelligible being—which is what being-qua-being means according to Syrianus—shows, through their causes, the order of all beings (*in Metaph.* 5.31–6.9) explaining how they all derive from the One (*aph' henos*) and ascend back to the One (*pros hen*; cf. *Metaph.* Γ. 2, 1003a33; b6; *Eth. Nic.* 1.6, 1096b27–8; cf. Van Campe 2009: 268–79; Dam. *Princ.* 1.3.18). The henads are held to exist "secretly" in the One-Being and manifestly only in their own hypostases, lest they jeopardize the unity of Being.

The first principle has an even greater, indeed an absolute, simplicity. That is why the first hypothesis consists of negations only, so Syrianus and Proclus argue: we should not think that *to hen* has any property at all. We cannot predicate anything of *to hen*; we cannot even properly name it, which is why the one is ineffable (and *that* predicate, too, should not be taken as a property). Proclus goes to great lengths to emphasize its unknowability and ineffability (6.1067.3; 1068.2; 1074.11–12; 1108.20; 7.501.27; 505.1–2 [= Plato *Prm.* 142a3–4]; 505.4–21; 508.15; 512.11–12; 518.24; 519.9–10). The negative predicates show that one can say only what *to hen* is not. When we say "*hen*" we do not name the principle, as if we were denoting its essence (*in Prm.* 7.508.12; 509.12–13; 513.9–10; the same holds for the predicate "partless": 6.1104.26–31). At the end we are reduced to silence (7.505.14–18; 521.25–6; *TP* 3.8, 30.7–8).

The predicates denied of *to hen* are not just absences, however. They are said to be productive of the affirmations in the second hypothesis, that is, they prefigure the positive attributes of Being (*in Parm.* 6.1075.15; 7.520.1–2). The basic intuition behind this claim appears to be that negations are always of something real, for otherwise they would be meaningless. One should object that that merely tells us something about our understanding: it is not clear what would justify us in believing that positive characteristics of Being depend upon what is said to be not the case of the One, as if these negations were somehow quasi-causal prefigurings of real properties. Whatever is meant by this obscure theory, by advocating it Proclus and Syrianus come close to reintroducing plurality in what should be utterly simple (Martin 2004: 70–73, makes some good points on Proclus' logic of negation). Proclus and Syrianus presumably make these claims because otherwise the existence of the One would be vacuous. After all, the One needs to be a principle or a cause of some sorts. It is indeed called thus, although Proclus hastens to add that it is not a genuine cause. For being a cause or principle could again be interpreted as a property. We should say that *to hen* is a cause from the perspective of other things alone, not in itself.

The ineffability of the first principle makes it very difficult, if not impossible, to write about it. Yet aporetic discourse is supposed to get us nearer. Hence Syrianus and Proclus constantly point out that what they are saying should not be understood straightforwardly. Time and again they retract their conclusions, yet intimate that these nonetheless reveal something of the truth. Plato, they argue, did the same when, at the very

end of the first hypothesis, the question whether the preceding series of negations is said truly of the One is itself, paradoxically, negated (Plato *Prm.* 142a6–8). This comes as a surprise: at this point of the dialogue one gets the impression that nothing can be affirmed of the One, and that therefore one should negate all predicates in relation to it. Now even that turns out to be wrong, however: it is *impossible*, says Parmenides, for these negations to be true of the one; hence they too need to be removed from it. Parmenides' final qualification of the whole first hypothesis baffled ancient interpreters. Proclus explains that even negations carry too much positive content, as they implicitly refer to something. Plato makes clear that rational discourse ultimately fails to express anything about the One (*in Prm.* 7.514.33–521.26; *TP* 2.10, 63.18–64.9, cf. Steel 1999; Steel 2004: 595–98).

As the negations are seen as somehow productive and the One as somehow a cause, the One is the ultimate principle from which all reality proceeds and to which all reality strives, and therefore also what is traditionally called god, that is, the supreme god. It is clear that the *autohen* whose existence is supposedly proved in the first propositions of *ET* is identical with the One of the first hypothesis. For in both cases it is described as simple in the most absolute way, and the argument from *ET* aims to show that there can only be one such entity. The One, or God, is moreover identical with the Good, famously said to transcend Being in Plato's *Republic* (509b6–9). Oneness and goodness are not two different things, as Proclus never tires to explain, which is why *the* One is not different from *the* Good. Indeed, for everything that exists, to be one amounts to being good, and *vice versa*. For a being exists only if it is one and for every being to exist is good (*ET* 13; *in Prm.* 7.511.12–13; cf. Dam. *Princ.* 1.94.22–95.1). Hence the One-Good is the source of existence and thus the ultimate principle of reality (*ET* 12; *TP* 3.7, 29.10–30.2). In case anyone may still wonder: "being" (*einai*) for a Platonist does not mean the same thing as "existing" (sometimes denoted by the verb *huparchō*). Although the One is said "not to be," one should not think that it does not exist (that it is *anhuparkton*, a view condemned by Syrianus and Proclus: *in Prm.* 7.515.4–29). It is also necessary to emphasize, again, that "one" and "good" do not express different characteristics of the One, as that would introduce duality.

Just as the One is beyond Being, it is beyond thought. The One may not be a thinkable, expressible object, yet minimally it must be an object of reference, for otherwise the argument in *ET* and the exegesis of the first hypothesis would not refer to anything. Plotinus usefully distinguishes between expressing the One and saying something *about* it (*Enn.* V 3 [49] 1–8; cf. Procl. *in Prm.* 7.518.22–23). In this minimal sense, the One is "something," even if it is unlike any other something. It cannot be an object of inquiry or thought, because the categories in which we think all derive from Being. Yet we need to assume the One as that which makes thinking possible: a point thinkers influenced by German Idealism tend to emphasize (Beierwaltes 1965: 337–38). There needs to be an original unity of thinking and that which is thought, that is, being. This original unity is found at the level of primary Being, yet the unity itself cannot be explained *at* this level: there needs to be a higher principle providing this unity. Thus, although thinking cannot ascend to the One, it reaches out towards it and in doing so becomes aware of its own limits. Thereby our souls are reduced to an insurmountable perplexity (Beierwaltes 1965: 360). This perplexity is brought to an extreme by Damascius.

Damascius and the ineffable

In most of his texts Damascius builds on and problematizes arguments and analyses offered by Proclus (Ahbel-Rappe 2010: xix–xxii; Cürsgen 2007: 317–35; Hoffmann 1997: 375–86; O'Meara 2004). Even more so than Proclus, he solicits a reflection on our own thinking. Attempts to say anything about the highest principle amount to discovering our own perplexity and tell more about ourselves than about this highest itself (cf. *Princ*. 1.6.7–16). Damascius' *On First Principles* begins with a famous aporia (1.1.4–6): "Is the one so-called principle (*archē*) of all <things> beyond all <things> or one among all <things>, as a kind of summit from which all <things> proceed?"

In other words: does the expression "all <things>" or "everything" include the first principle or not? If, on the one hand, the principle is not among all things, "all things" are not really *all* things (1.1.8–11). If, on the other hand, the principle is together with all things, there can be no principle. For if the principle is included with all things, all-things-including-their-principle (call this "AiP") should not have a further principle: that would be the beginning of a regress. Now everything has to be either a principle or from a principle. If AiP is from a principle, however, the principle is again outside all things, which is contrary to the present hypothesis. AiP cannot be itself a principle either, for a principle has to be a principle of something, but there is nothing besides it (1.2.9–20).

Perhaps we should not accept the premise that everything is either a principle or from a principle. Yet Damascius simply repeats an assumption that was common among Platonists (for example, Simpl. *in Phys*.533.34). If his argument is to be understood as dialectical with them as interlocutors, it cannot be dismissed by attacking the principle. Even with this premise granted, however, the argument is not valid, as it rests on a confusion between the distributive and the collective use of "all things" (O'Meara 2004: 103): if every single thing is either a principle or from a principle, it does not follow that AiP is a principle or from a principle. The proposition would be valid for any single member of AiP, but not for AiP as a whole. If Damascius were to insist that AiP itself is a "thing" to which the premise should apply, it is obvious that the premise itself was false (it was never intended to be used in this way in the first place). So, with a few distinctions in place, it becomes clear that the difficulty raised by Damascius is not a difficulty at all. Yet there is a deeper problem.

Damascius cannot accept that the first so-called principle is counted with other things, as an element of the set of all things or as part of the whole. The One cannot belong to the many or to the whole (1.3.5; the same idea is also expressed by Plotinus *Enn*. V 5 [32] 6.8–13 and Proclus *TP* 2.5, 37.24). For if it were with the many, one would need another principle prior to it founding the unity of the whole (1.3.21–25). So far the argument is reminiscent of Proclus *ET* 1, but Damascius takes a crucial further step. The One itself, as the unifying principle of "all things" cannot be the first thing. Even though it does not belong to all (other) things, it somehow is all things, namely as their cause (as the cause of their unity). The principle of all things must therefore transcend the One-itself (1.4.1–12). It should not be called a principle or a cause, nor the first, nor before or beyond all things, as all these expressions would somehow relate it to other things (1.4.15–18; 1.30.20–4; Van Riel 2010: 675–79).

As negative as the theology of the first hypothesis may be, its subject remains *to hen*. It is only at the very end of the hypothesis that Parmenides, the interlocutor in Plato's dialogue, intimates the presence of something even higher, namely when he asserts the

impossibility of the negations. Whereas Proclus took this remark as an expression of the ineffability of the One, Damascius distinguishes between the One and something more truly ineffable, of which one cannot even say that it is one, and which is completely unknowable, even to a divine knower (*Princ.* 1.55.9–56.19; 1.19.4–12). Thereby Damascius espouses an old view put forward by Iamblichus, who also thought that the One, but not the highest principle, is dealt with in the first hypothesis (2.1.4–12; cf. Simpl. *in Phys.* 795.15–17; it is not clear whether Iambl. *Myst.* 8.2 exhibits the same idea; Dillon 2010: 360–1). Plato has wisely avoided referring to the ineffable, but hints at it occasionally, so Damascius thinks, for instance at *Prm.* 142a6–8 (*Princ.* 1.9.10–13; Napoli 2008: 53).

Is Damascius' solution an improvement over the position of Syrianus and Proclus? They too, after all, said that the highest principle is ineffable and unknowable, has neither attributes nor a name, that it is not properly speaking a producing cause, and that it has no relation to other things (for the latter point, see Prod. *in Prm.* 7.503.14–19; Damascius admits that Syrianus and Proclus distinguish between a *hen* that has a relation to the unified and *to hen* transcending all relations: *Princ.* 2.17.3–17; Klitenic Wear 2011: 6 reads this passage differently). Yet Proclus does sometimes call it a cause (*in Prm.*6.1075.14; 1108.20), says we have some notion of it (7.510.31–2; 511.4) and admits that the word *hen* somehow makes it possible to express the inexpressible (a rhetorical turn, nonsensical when taken literally; cf. 7.512.11–13). Damascius wanted to put an end to such tergiversation by postulating an even higher principle. He is right that Proclus fails to make the One completely unknowable and devoid of attributes: despite his good intentions Proclus every so often slips back into a more murky position (on one occasion, however, Proclus suggests that the first principle transcends *to hen*: *TP* 3.8, 31.12–17). It is Damascius' diagnosis that this ambiguity is unavoidable so long as one is speaking about the *One*. Oneness implicitly refers to plurality, which is why even *to autohen* should not be called "one" (*Princ.* 1.98.1–27). Hence Damascius proposes to get rid of all reference to oneness when thinking about the highest.

Yet his attempt, too, fails. For Damascius has to find *some* linguistic expression to refer to it (he intentionally explodes rational discourse: 1.20.5–22.19; Combès 1996: 253–54). When he claims that calling it ineffable does not express anything about it, however, we are in fact back where we were with Proclus. Proclus too is aware of the fact that his first principle should not be called 'one' in the proper sense, as it is not the unity *of* something (this is already presupposed by the argument in *ET*, for otherwise *to hen* would be just so much in need of plurality as plurality needs *to hen*; they would be "in each other," as Damascius *Princ.* 1.95.9–10 phrases it). If that is true for Proclus' *hen*, too, an important reason for separating off an even higher "hyper-unknowable" (1.84.18) vanishes into thin air. Finally, Damascius too will have to consider his highest principle as a cause or principle in some minimal sense, for otherwise its (counterfactual) non-existence wouldn't change anything: the highest principle would be absolutely superfluous. No Platonist wants to say that. Damascius' efforts are instructive. They show that whoever wants to write about the ineffable is asking for trouble.

The treatment of the first principle by the three philosophers discussed in this chapter is illustrative of their usual method and approach: Syrianus establishes the core of the theory; Proclus develops it further, spells out the logical principles of the system (*ET* contains a systematic account of those) and displays an extraordinary exegetical

refinement as can be seen in his discussion of passages from, in this case, the *Parmenides*; Damascius brings to a head the difficulties inherent to the theory, exploiting the aporiai to deepen the reflection about philosophical method. These patterns can be observed in their discussion of many other philosophical issues.

References and further reading

Editions and translations

Syrianus

Cardullo, R. L. (1995) *Siriano, Esegeta di Aristotele*, I, *Frammenti e Testimonianze dei Commentari all'Organon*. II, *Frammenti e Testimonianze del Commentario alla Fisica*. Introduzione, Testo, Traduzione, Note e Commento, Firenze: La Nuova Italia.

Dillon, J. and O'Meara, D. (trans.) (2006) *Syrianus: On Aristotle Metaphysics 13–14* (Ancient Commentators on Aristotle) London: Duckworth.

Dillon, J. and O'Meara, D. (trans.) (2008) *Syrianus: On Aristotle Metaphysics 3–4* (Ancient Commentators on Aristotle), London: Duckworth.

Klitenic Wear, S. (2011) *The Teachings of Syrianus on Plato's Timaeus and Parmenides*, Leiden and Boston, MA: Brill.

Kroll, G. (1902) *Syriani in Metaphysica commentaria*, (ed.) G. Kroll (Commentaria in Aristotelem Graeca, VI.1), Berlin: G. Reimer.

Proclus

For a recent survey of editions, translations, and secondary literature on Proclus see: Steel, C. *et al.* (2005). 'Proclus: Fifteen Years of Research (1990–2004). An Annotated Bibliography', by P. d'Hoine, C. Helmig, C. Macé, L. Van Campe, under the direction of C. Steel, Göttingen [= *Lustrum* 44 (2002)]. For more recent works see: http://hiw.kuleuven.be/dwmc/ancientphilosophy/proclus.

Baltzly, D., Runia, D., Share, M., and Tarrant, H. (trans.) (2007–13) *Proclus: Commentary on Plato's Timaeus*, 5 vols., Cambridge: Cambridge University Press.

Boese, H. (1960) *Procli Diadochi Tria Opuscula (De providentia, libertate, malo)*. Latine Guilelmo de Moerbeka vertente et Graece ex Isaacii Sebastocratoris aliorumque scriptis collecta, Berlin: de Gruyter.

Diehl, E. (1903, 1904, 1906) *Procli Diadochi in Platonis Timaeum commentaria*, 3 vols., Leipzig: Teubner.

Dodds, E. R. (1963) *Proclus: The Elements of Theology. A Revised Text with Translation, Introduction and Commentary*, Oxford: Clarendon Press.

Duvick, B. (2008) *Proclus: On Plato Cratylus* (Ancient Commentators on Aristotle), London: Duckworth.

Friedlein, G. (1873) *Procli Diadochi in primum Euclidis Elementorum librum commentarii*, Leipzig: Teubner.

Kroll, G. (1899 and 1901) *Procli Diadochi in Platonis Rem Publicam commentarii*, 2 vols., Leipzig: Teubner.

Lang, H. S. and Macro, A. D. (2001) *Proclus: On the Eternity of the World. De aeternitate mundi*. Greek text with introduction, translation and commentary. (Argument I translated from the Arabic by J. McGinnis), Berkeley, CA: University of California Press.

Marzillo, P. (2010) *Der Kommentar des Proklos zu Hesiods "Werken und Tagen": Edition, Übersetzung und Erläuterung der Fragmente*, Tübingen: Narr.

Morrow, G. R. (trans.) (1970) *Proclus: A Commentary on the First Book of Euclid's Elements*, Princeton, NJ: Princeton University Press.

Morrow, G. R. and Dillon, J. M. (trans.) (1987) *Proclus' Commentary on Plato's Parmenides*, Princeton, NJ: Princeton University Press.

O'Neill, W. (1965) *Proclus: Alcibiades I. A Translation and Commentary*, The Hague: Nijhoff [Reprint Dilton Marsh, Westbury: Prometheus Trust, 2011].

Opsomer, J. and Steel, C. (trans.) (2003) *Proclus: On the Existence of Evils* (Ancient Commentators on Aristotle), London: Duckworth.

Opsomer, J. and Steel, C. (trans.) (2012) *Proclus: Ten Problems Concerning Providence* (Ancient Commentators on Aristotle), London: Bristol Classical Press.

Pasquali, G. (1908) *Procli Diadochi in Platonis Cratylum commentaria*, Leipzig: Teubner.
Saffey, H. D. and Westerink, L. G. (1968, 1974, 1978, 1981, 1987, 1997) *Proclus: Théologie platonicienne*, 6 vols., Paris: Les Belles Lettres.
Segonds, A.–P. (1985, 1986). *Proclus: Sur le Premier Alcibiade de Platon*, 2 vols., Paris: Les Belles Lettres.
Steel, C. (trans.) (2007) *Proclus: On Providence* (Ancient Commentators on Aristotle), London: Duckworth.
Steel, C. et al. (2007–9) *Procli in Platonis Parmenidem commentaria*, 3 vols., Oxford: Clarendon.

Damascius

Ahbel-Rappe, S. (2010) *Damascius' Problems & Solutions Concerning First Principles. Translated from the Greek*, New York: Oxford University Press.
Athanassiadi, P. (1999) *Damascius. The Philosophical History* [= Vita Isidori], Athens: Apamea.
Van Riel, G. (2008) Damascius. *Commentaire sur le Philèbe de Platon.*, Paris: Les Belles Lettres.
Westerink, L. G. and Combès, J. (1986, 1989, 1991) *Damascius: Traité des premiers principes*, 3 vols., Paris: Les Belles Lettres.
Westerink, L. G., Combès, J., and Segonds, A.–P. (1997, 1997, 2002, 2003) *Damascius: Commentaire du Parménide de Platon*, 4 vols., Paris: Les Belles Lettres.
Westerink, L. G. (1977) *The Greek Commentaries on Plato's Phaedo*, Volume II, Damascius, Amsterdam, Oxford and New York: North-Holland Publishing Company [Reprint Dilton Marsh, Westbury: Prometheus Trust, 2009].
Zintzen, C. (1961) *Damascii Vitae Isidori reliquiae*, Hildesheim: Olms.

Secondary sources

Beierwaltes, W. (1965) *Proklos. Grundzüge seiner Metaphysik*, Frankfurt am Main: Klostermann.
Brumbaugh, R. S. (1982) "Cantor's Sets and Proclus' Wholes," in R. Baine Harris (eds.) *The Structure of Being: A Neoplatonic Approach*, Norfolk, Virginia: International Society for Neoplatonic Studies, 104–13.
Bussanich, J. (1996) "Plotinus' Metaphysics of the One," in L. P. Gerson (ed.) *The Cambridge Companion to Plotinus*, Cambridge: Cambridge University Press, 38–65.
Combès, J. (1996) *Etudes néoplatoniciennes*, Grenoble: Millon.
Chlup, R. (2012) *Proclus: An Introduction*, Cambridge: Cambridge University Press.
Cürsgen, D. (2007) *Henologie und Ontologie. Die metaphysische Prinzipienlehre des späten Neuplatonismus*, Würzburg: Könighausen & Neumann.
Dillon, J. (2009) "The Architecture of the Intelligible Universe Revealed: Syrianus' Exegesis of the Second Hypothesis of the *Parmenides*," in A. Longo (ed.) *Syrianus et la métaphysique de l'Antiquité tardive*, Naples: Bibliopolis: 233–45.
Dillon, J. (2010) "Iamblichus of Chalcis and his School," in L. P. Gerson (ed.) *The Cambridge History of Philosophy in Late Antiquity*, Cambridge: Cambridge University Press: 358–74.
Frede, M. (2009) "Syrianus on Aristotle's *Metaphysics*," in A. Longo (ed.) *Syrianus et la métaphysique de l'Antiquité tardive*, Naples: Bibliopolis: 23–56.
Frege, G. (1950) *The Foundations of Arithmetic. A Logico-Mathematical Enquiry into the Concept of Number*, translated by J. L. Austin, Oxford: Blackwell.
Hathaway, R. (1982) "The Anatomy of a Neoplatonist Metaphysical Proof," in R. Baine Harris (ed.) *The Structure of Being. A Neoplatonic Approach*, Norfolk, VA: International Society for Neoplatonic Studies: 122–36.
Helmig, C. and Steel, C. (2011) "Proclus," *The Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/archives/sum2011/entries/proclus/, Summer 2011.
Hoffmann, P. (1997) "L'expression de l'indicible dans le néoplatonisme grec de Plotin à Damascius," in C. Lévy and L. Pernot (eds.) *Dire l'évidence*, Paris, Montréal: L'Harmattan: 335–90.
Martin, J. N. (2004) *Themes in Neoplatonic and Aristotelian logic: Order, Negation, and Abstraction*, Aldershot: Ashgate.
Napoli, V. (2008) *Epekeina tou henos. Il principio totalmente ineffabile tra dialettica ed esegesi in Damascio*, Catania: CUECM.
O'Meara, D. J. (2004) "Notes on the Aporetics of the One in Greek Neoplatonism," in J.-M. Narbonne and A. Reckermann (eds.) *Pensées de l' "Un" dans l'histoire de la philosophie. Études en hommage au Professeur Werner Beierwaltes*, Paris, Saint-Nicolas (Québec): Vrin, Les Presses de l'Université Laval: 98–107.

Oppy, G. R. (2006) *Philosophical Perspectives on Infinity*, Cambridge: Cambridge University Press.
Schmitz, M. (2002) "Zur Logik der henologischen Metaphysik. Zu Proklos, Elementatio Theologica, prop. 1," in M. Barbanti et al. (eds.) *Henosis kai philia. Unione e amicizia. Omaggio a Francesco Romano*, Catania: CUECM, 455–67.
Steel, C. (1999) "'Negatio negationis'. Proclus on the Final Lemma of the First Hypothesis of the *Parmenides*," in J. Cleary (ed.) *Traditions of Platonism: Essays in Honour of John Dillon*, Aldershot: Ashgate: 351–68.
Steel, C. (2000) "Le *Parménide* est-il le fondement de la *Théologie Platonicienne*?," in A. Ph. Segonds and C. Steel (eds.) *Proclus et la Théologie Platonicienne*, Leuven, Paris: Leuven University Press – Les Belles Lettres: 373–98.
Steel, C. (2002) "Une histoire de l'interprétation du *Parménide* dans l'Antiquité," in M. Barbanti and F. Romano (eds.) *Il Parmenide di Platone e la sua tradizione. Atti del III Colloquio Internazionale del Centro di Ricerca sul Neoplatonismo*, Catania: CUECM: 11–40.
Steel, C. (2004) "Beyond the Principle of Contradiction? Proclus' 'Parmenides' and the Origin of Negative Theology," in M. Pickavé (ed.) *Die Logik des Transzendentalen. Festschrift für Jan A. Aertsen zum 65. Geburtstag*, Berlin, New York: de Gruyter: 581–99.
Steel, C. (2009) "Syrianus' Theological Interpretation of the *Parmenides*. The Time of the Divine Souls," in A. Longo (ed.) *Syrianus et la métaphysique de l'Antiquité tardive*, Naples: Bibliopolis: 201–29.
Steel, C. (2010) "Proclus," in L. P. Gerson (ed.) *The Cambridge History of Philosophy in Late Antiquity*, Cambridge: Cambridge University Press: 630–53.
Van Campe, L. (2009) "Syrianus and Proclus on the Attributes of the One in Plato's *Parmenides*," in A. Longo (ed.) *Syrianus et la métaphysique de l'Antiquité tardive*, Naples: Bibliopolis: 247–80.
Van Riel, G. (2010) "Damascius," in L. P. Gerson (ed.) *The Cambridge History of Philosophy in Late Antiquity*, Cambridge: Cambridge University Press: 667–96.

Additional reading

Chiaradonna, R. and Trabattoni, F. (eds.) 2009. *Physics and Philosophy of Nature in Greek Neoplatonism. Proceedings of the European Science Foundation exploratory workshop (Il Ciocco, Castelvecchio Pascoli, June 22–24, 2006)* (Philosophia antiqua, 115), Leiden, Boston: Brill.
Dillon, J. (1996) "Damascius on the ineffable," *Archiv für Geschichte der Philosophie*, 78, 120–9 [reprint: 1997. *The great tradition: further studies in the development of Platonism and Early Christianity*, Aldershot: Ashgate: 120–9].
Helmig, C. (2012) *Forms and Concepts. Concept Formation in the Platonic Tradition* (Commentaria in Aristotelem Graeca et Byzantina. Quellen und Studien, 5) Berlin: De Gruyter.
Hoffmann, P. (1994) "Damascius," R. Goulet (ed.) *Dictionnaire des philosophes antiques* II, Paris, 541–93.
Lernould, A. (2001) *Physique et théologie. Lecture du Timée de Platon par Proclus*, Villeneuve d'Ascq: Septentrion.
Lloyd, A. C. (1990) *The Anatomy of Neoplatonism*, Oxford: Oxford University Press.
Longo, A. (2005) *Siriano e i principi della scienza*, Naples: Bibliopolis.
Linguiti, A. (1988) "Giamblico, Proclo e Damascio sul principio anteriore all'uno," *Elenchos*, 9.1: 95–106.
Martijn, M. (2010) *Proclus on nature. Philosophy of Nature and Its Methods in Proclus' Commentary on Plato's Timaeus* (Philosophia antiqua 121) Leiden, Boston: Brill.
Remes, P. (2008) *Neoplatonism*, Berkeley, Los Angeles, CA: University of California Press.
Saffrey, H. D. (1990) *Recherches sur le Néoplatonisme après Plotin* (Histoire des doctrines de l'Antiquité classique, 14) Paris: Vrin.
Saffrey, H. D. (2000) *Le néoplatonisme après Plotin* (Histoire des doctrines de l'Antiquité classique, 24) Paris: Vrin.
Segonds, A. Ph. and Steel, C. (eds.) (2000) *Proclus et la Théologie Platonicienne. Actes du Colloque International de Louvain (13–16 mai 1998)* Leuven, Paris: Leuven UP.
Siorvanes, L. (1996) *Proclus. Neo-Platonic Philosophy and Science*, Edinburgh: Edinburgh UP.
Steel, Carlos (1978) *The Changing Self. A Study on the Soul in Later Neoplatonism: Iamblichus, Damascius and Priscianus* (Verhandelingen van de Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België, Klasse der Letteren, Jaargang XL, Nr. 85) Brussel: Paleis der Academiën.
Trouillard, J. (1982) *La mystagogie de Proclos* (Collection d'Etudes Anciennes) Paris: Les Belles Lettres.
Watts, E. J. (2006) *City and School in Late Antique Athens and Alexandria* (The transformation of the classical heritage, 41) Berkeley, Los Angeles, CA, London: University of California Press.

Related chapters

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45
THE ANCIENT COMMENTATORS ON ARISTOTLE

James Wilberding

I: A historical overview of the commentators

There has been a considerable increase of interest in the so-called ancient commentators on Aristotle in recent years. Thanks to Richard Sorabji's translation series *The Ancient Commentators on Aristotle* as well as to his *Sourcebook* volumes (Sorabji 2005) these authors are now increasingly accessible to a much wider audience, and there are now a number of introductory discussions to this period, where before there were none (Sorabji 1990b; Fazzo 2004; Hoffmann 2006; Falcon 2009; Tuominen 2009; for up-to-date discussions of many of the individual commentators, see Gerson 2010). Indeed, the inclusion of this chapter in the present volume is a testament to this new interest.

There are, however, problems with the label "commentator." It is, first of all, far from clear what ought to count as constituting a commentary. Must a commentator, for example, be sympathetic to the views that he is expounding, or should we also count polemical exegesis as a form of commentary? Furthermore, one's level of allegiance is but one of several variables including especially comprehensiveness and systematicity that complicate the task of setting rigid boundaries to the genre of ancient commentary. For this reason it is difficult to say what, if anything, should count as the "first" philosophical commentary—a difficulty that is compounded by the fact that much candidate material has survived only in reports and titles, if at all. Indeed, it would seem that the philosophical commentary is a genre rather long in the making (Baltussen 2007). That said, a notion of a "running" commentary as a systematic and loyal exposition of a text in its entirety does ultimately emerge, and it is in this sense that we usually speak of the "ancient commentators on Aristotle," though as we shall see below, there is still a great degree of variation in their methods.

Furthermore, the project of commentating on a text will strike many modern ears as a philosophically passive activity in which one is interested more in uncovering the history of philosophy than in actually doing philosophy, but here we need to keep several points in mind. The authors that we are considering here are hardly thinkers who were solely interested in figuring out what the author of the text in question was saying without scrutinizing whether what is being said is actually true. Rather, they were concerned to develop interpretations of the text that are meant to be exegetically and above all

philosophically compelling. This will often involve reinventing and even opposing Aristotle, and is sometimes achieved via long thematic digressions within the commentaries, for example that of Simplicius on the nature of space and time in his commentary on the *Physics* (Urmson and Siorvanes 1992). Moreover, labeling someone as a 'commentator on Aristotle' misleadingly suggests that this person's philosophical activity is exhausted by the composition of commentaries on Aristotle's work, and so few would be inclined to label Galen, for example, a "commentator on Aristotle" even though he composed several (now lost) commentaries on Aristotle's logical works. The fact is, however, that nearly all of those so labeled were involved in other projects. To give just a few examples, Alexander of Aphrodisias wrote treatises of his own, three of which—his *On the Soul*, *On Fate* and *On Mixture*—are extant (for a list of lost and surviving works of Alexander, see Sharples 1987: 1182–94), and John Philoponus wrote numerous philosophical, scientific and above all theological works (Scholten 1996: 429–35). Even Simplicius, who does appear to have written only commentaries, extended his exegetical focus beyond the Aristotelian corpus to Epictetus, Euclid, Iamblichus and Hermogenes (Hadot 1990).

The emergence of the running commentary in the first century BC reflects the changes in school curricula that placed increasing emphasis on understanding the texts of the schools' founders and often took the form of a *sunanagnōsis*—literally, a "reading group" in which teacher and students would read a passage of text together with the teacher then explaining it (Hadot 2002). These reading groups or lectures were thus conducive to the subsequent publication of commentaries, in the form of either the teacher's own notes (generally called *hupomnēmata*) or the notes of one or more students (often called *skholia* and characterized in the title as being "from the voice of" (*apo phōnēs*) the teacher, though not all of these student editions make this clear in the title, for example, Philoponus's commentary on Aristotle's *Categories* (Richard 1950). It is now standard to distinguish between four periods of commentary activity.

(1) The first period, to which the anonymous commentary on Plato's *Theaetetus* is arguably also to be dated, encompasses the exegetical works produced in the first century BC (Gottschalk 1990). It is customary to attribute a central role in the birth of the Aristotelian commentaries of this period to Andronicus of Rhodes, who is said to have arranged Aristotle's esoteric works and made them accessible to a wider audience (Strabo 13.1.54; Plutarch *Life of Sulla* 26; Porphyry *VP* 24), though it is now thought that the significance traditionally accorded to him might be exaggerated (Barnes 1997; Frede 1999: 772–6). The *Categories* received the nearly undivided attention of these authors, though here we are unfortunately left with only names and fragments, and only two names warrant special mention here: Boethus of Sidon, a pupil of Andronicus whose work on the *Categories* Simplicius obviously held in very high esteem (*in Cat.* 1.17–18) and who is thought to have had a significant impact on subsequent commentaries (Gottschalk 1990: 74), and Nicolaus of Damascus (on whom see Moraux 1973: 445–514).

(2) Commentary activity seems to have then let up significantly until the second period, encompassing the pre-Porphyrian commentators of the second and third centuries AD, in whom we still find an Aristotelian approach largely untainted by Platonism. Here again two figures stand out above the rest: Aspasius and Alexander of Aphrodisias. Aspasius (*fl.* first half of second century) is the author of our first extant (at least in parts) commentary on Aristotle, specifically on Books 1–4, 7 and 8 of the *Nicomachean Ethics*, as well as (with varying degrees of certainty) of commentaries on

the *Categories*, *De Interpretatione*, *Physics*, *De Caelo* and the *Metaphysics* that are now lost (Barnes 1999). Aspasius's commentaries included *lemmata*, that is, *verbatim* passages of the object text (Wittwer 1999), followed by exposition, which often amounted to little more than a paraphrase, but here we already find cases of independent thematic digressions, for example, his discussion of the emotions at 42.27–47.2 (Sorabji 1999). Yet these commentaries could not hold a candle to those of Alexander of Aphrodisias (*fl*.c. 205 AD), a philosopher and exegete who even in late antiquity was held to be unequaled among the commentators (Simplicius *in Phys*. 80.15–16 and 258.16–17; Philoponus *Aet. Mundi* 48.7–11) and who today is considered to be the last great true Aristotelian of late antiquity. The catalogue of works that Alexander is known or thought to have written is massive (Sharples 1987; Moraux 2001: 619–625; Rashed 2007) and includes extant commentaries on the *Prior Analytics* 1, *Topics*, *Meteorology*, *De Sensu*, *Metaphysics* (Books A–Δ), lost commentaries (with some parts of varying length preserved, not always in Greek) on the *Categories*, *De Interpretatione*, *Posterior Analytics*, *Physics*, *De Caelo*, *De Generatione et Corruptione* and *De Anima*. It has been argued that Alexander's style of commentary, marked by its continuity and large-scale lemmatization, had a strong influence on Syrianus and through him ultimately provided the basic format for most of the commentaries of the fifth and sixth centuries (D'Ancona Costa 2002). He also wrote thematic treatises, notably the extant *On Fate*, *On Mixture* and *De Anima*, though here again the approach is thoroughly Aristotelian and the conclusions reached are presented as Aristotle's own. Yet his allegiance to Aristotle hardly prevents him from occasionally criticizing Aristotle's arguments and especially from developing Aristotle's views in new and interesting ways, as we shall see in the case study below.

(3) The third period, to which the majority of the commentaries edited in the *Commentaria in Aristotelem Graeca* belong, effectively begins with Porphyry (232–309 AD) and ends around 610 AD when Stephanus was called to the public teaching chair in Constantinople. The major commentary figures of this period include primarily: Porphyry, Iamblichus, Dexippus (all third–early fourth century); Themistius (fourth century); those associated with the Athenian school—Plutarch of Athens (d. 432), Syrianus (d. 437), Proclus (d. 485) and Damascius (fifth–sixth century—the final head of school at the time of its closing in 529) and Priscian of Lydia (first half of sixth century); and those associated with the Alexandrian school—Hierocles (fifth century), Hermeias (fifth century), Ammonius (fifth–early sixth century), Philoponus (d. 570s), Asclepius (sixth century); Olympiodorus (d. after 565); Elias (late sixth century); David (late sixth century) and Stephanus (sixth–early seventh century). The chance fact that the majority of the surviving Alexandrian commentaries are on Aristotelian texts, whereas most of the surviving Athenian commentaries are on Plato, might encourage the belief that the Alexandrian commentators were somehow truer Aristotelians and/or less committed to Platonism. Indeed, a thesis along these lines was cautiously argued by Karl Praechter on the basis of his groundbreaking examinations of these thinkers. But the thesis has not survived closer scrutiny, which rather suggests that there are no major doctrinal differences between the two schools (Hadot 1990; Verrycken 1990a), though there were important differences in how the schools were run and linked to their respective communities and in particular to their religious communities (Watts 2006). In fact, this is exactly what one should expect given the degree of interaction between the two schools, for example, Ammonius, Heirocles and Hermeias were all trained in Athens before relocating to Alexandria, and Simplicius studied both with Ammonius in

Alexandria and then in Athens with Damascius (though he composed his commentaries elsewhere after the closure of the Academy).

Porphyry's significance to the commentary tradition consisted in his achievements in harmonizing the thought of Plato and Aristotle into a single, unified philosophy. This program of harmonization certainly predates Porphyry and can be traced back as far as Antiochus, but it was Porphyry who appears to have initiated the Platonic tradition of writing commentaries on Aristotle by clearing out a number of perceived tensions between Aristotle and Plato (Karamanolis 2006). Much of this is due to the impact of Porphyry's work on the *Categories*—he wrote two commentaries on it (one lost and one extant) plus an (extant) introduction to it (the *Isagōgē*)—but we know he also wrote commentaries on the *De Interpretatione* and the *Physics* in addition to some exegetical work of a now indeterminable nature on the *Sophistici Elenchi*, the *Prior Analytics* and on Book Λ of the *Metaphysics*. All of these, together with the two treatises on the harmony between Plato and Aristotle attested to Porphyry (Smith 1993: 34–163), provided a model for subsequent Platonists—and *all* commentators of this period qualify as Platonists (Themistius used to be considered an exception to this rule, but see, for example, Ballériaux 1996)—to work on Aristotle in a non-polemical manner. This harmonization should be understood to mean neither that they were unaware of the differences in the views expressed in the texts nor that they were all equally interested in explaining away all of these differences. Indeed, there are unquestionably varying degrees of commitment to harmonization, with Syrianus, Proclus and Philoponus at the less extreme end of the spectrum and Porphyry, Ammonius and Simplicius usually represented as giving us the consummate form of harmonization—for Simplicius showing the harmony between Plato and Aristotle 'in most things' is a commentator's duty (Simplicius *in Cat.* 7.29–32). There has already been ample discussion of how this harmonization was achieved on many central doctrinal issues on which Plato and Aristotle would at least seem to be seriously disagreeing, for example, the categories, the nature of God, the Forms, individual immortality, and the fifth body of the heavens (see, for example, Gerson 2006; Sorabji 2006), but as we shall see below in our case study, harmony was also achieved by applying Platonic explanatory models to Aristotle's explanations of the sensible world—even regarding phenomena on which Plato was silent and there was no textual tension to be overcome.

This approach allowed Aristotle to be integrated into a curriculum that by the end of this period had become fairly standardized and that is now reflected in the commentaries that have survived. The curriculum basically consisted in reading a series of texts complemented by a series of preliminary introductions to these texts. The commentaries on Porphyry's *Isagōgē* reveal to us the starting point of the curriculum, which would begin with a general introduction to philosophy, followed by an introduction to the *Isagōgē*, before then reading the *Isagōgē* itself. After this, the students would receive a general introduction to Aristotle, an introduction to his *Categories* and then proceed to read the text of the *Categories* together with their teacher (all contained in the commentaries on the *Categories*). Then a brief look at the list of surviving commentaries (Sorabji 1990b: 27–29; Goulet 2003: 113–121) gives us an idea of where they went from there. The rest of the *Organon* would be read followed by Aristotle's physical treatises (including the *de Anima* but excluding the biological treatises) with the education in Aristotle being capped by reading the *Metaphysics*, and all of this was a mere preliminary to the study of Plato (Hadot 1985), which in some cases was then crowned with the study of more esoteric texts such as those ascribed to Orpheus and the *Chaldaean Oracles*. An

increasing formalization can also be witnessed in the methodology of the commentaries. In addition to lemmatization, commentaries began to be divided into hour-long lessons (*praxeis*), which were in turn divided in a general discussion (*theōria*) of the issues contained in the *lemma* and a subsequent discussion (*lexis*) of the textual details. These divisions are, however, hardly to be found in all the surviving commentaries. They are particularly prominent in the commentaries of the Alexandrians Olympiodorus, Elias, David and Stephanus, but they can already be found in a less rigid form in Athenian commentaries, such as those of Proclus (Festugière 1963; Westerink 1971: 7–8). Simplicius, by contrast, does not seem to have written his commentaries in an educational setting and so does not follow these divisions. Moreover, some earlier commentators took thoroughly different approaches, for example, Themistius (fourth century AD) produces interpretive paraphrases (though here, too, one finds philosophical digressions) and Alexander (*Quaest.* 2.21), Porphyry (*in Cat.*) and Dexippus (*in Cat.*) had all produced at least some interpretative work in the form of dialogues.

(4) The final period of Greek commentaries on Aristotle does not commence until the eleventh century, and the most exciting development of the period is a commentary project conceived and directed by Princess Anna Comnena (1083–1153 AD), daughter of the Byzantine Emperor Alexis I Comnenus, whose aim seems to have been to fill the gaps left in the Aristotelian commentary tradition (Browning 1990). Thus, in this period treatises that had been previously left aside—notably the biological works, the *Politics* and the *Rhetoric*, finally received their due attention from commentators, and it was Michael of Ephesus (twelfth century) who did much of the filling-in. Michael was thus the first to comment on the biological treatises *De Partibus Animalium*, *De Motu Animalium*, *De Incessu Animalium* and *De Generatione Animalium*, all of which survive in addition to commentaries on the *Parva Naturalia*, the *Sophistical Refutations* and Books 6–14 of the *Metaphysics*. He also appears to have produced commentaries on the relatively neglected *Politics* and *Rhetoric*. Moreover, he contributed commentaries on Books 5, 9 and 10 to Princess Anna's compendium commentary on the *Nichomachean Ethics*, all of which survives. Michael is often compared to Alexander of Aphrodisias, both for his breadth of interest and for his relatively untainted Aristotelianism, though this is hardly true of all of the commentators of this period. Eustratius of Nicaea (d. c. 1120 AD), also a member of Princess Anna's project team, and Michael Psellus (1018–after 1081) both had strong Platonic leanings. For more on this period see Ierodiakonou and Bydén (2008).

II: A case study in the metaphysics of celestial light and heat

The above historical overview is meant to provide some initial orientation to those unfamiliar with these authors, but there is no better way to understand the commentators' aims, methods, and innovations than by observing them at work. Aristotle's remarks on the generation of solar heat provide an excellent opportunity to do just this. For they allow us to see the commentators critically recognizing both problems of internal consistency within Aristotle's cosmology and empirical phenomena that would seem to contradict his remarks, but it also shows us the commentators providing innovative solutions to these problems, solutions that can make legitimate claims to being genuine philosophical advancements.

Aristotle famously argues against Plato's claim (*Tim.* 39e10–40b8) that the celestial things (by which I mean both the celestial bodies and the spheres containing them) are

composed of the four traditional elements with fire predominating, not only because so much fire would end up consuming the rest of the universe (*Mete*. 1.3, 340b1–3), but also because there must be a fifth simple body that corresponds to the simple circular motion of the heavens (*Cael*. 1.2). Moreover, Aristotle infamously draws the conclusion that this fifth simple body, which came to be known as ether, could not possess any contrary properties, since contrary properties are always accompanied by contrary motions, but there is no contrary to circular motion (*Cael*. 1.3–4). These rather intriguing claims form the background against which Aristotle must then "save the phenomena." After all, the sun certainly does seem to emit heat and light, for which there are the contraries properties of coldness and darkness, and so these phenomena must be explained in some other way. His primary explanation is given in *De Caelo* 2.7 and *Meteorology* 1.3:

> Heat and light arise from them when the air is chafed by their locomotion. For movement is of a nature to cause wood, stones, and iron to ignite; and so it is more reasonable that what is nearer to fire is ignited, and air is nearer. As is the case, for example, with missiles in flight, since these themselves ignite, with the result that lead balls melt, and, since these ignite, the air about them must experience this same effect. These missiles, then, are heated due to their movement in air, and air becomes fire as a result of the collision due to the movement. Each of the upper bodies is carried in its sphere, so that these bodies themselves cannot ignite, but the air lying beneath the sphere of the rotating body can only heat up when the sphere is moving, and especially in that area where the sun happens to be fixed—which is why heat arises when the sun draws near, rises, and stands above us. That, then, the stars are neither fiery nor carried in fire, we may now say.
>
> (*Cael*. 2.7, 289a19–35, Leggatt translation (1955))

> A separate and exact account of the heat generated by the sun's action would be more in place in a treatise on sensation (for heat is a sensible quality): but we may explain now the reason why it is generated although the heavenly bodies themselves are not naturally hot. We see that motion can rarefy and inflame air, so that, for example, objects in motion are often found to melt. The sun's *motion* is therefore in itself sufficient to produce warmth and heat: for to produce heat a motion must be rapid but not far off. The motion of the stars is rapid but far off: that of the moon close but slow: but the sun's motion has both required characteristics to a sufficient degree. That the heat is increased by the presence of the sun is easily enough explained by considering analogies from our own experience: for here too the air in the neighborhood of a projectile becomes hottest. That this should be so is easily explicable, for the movement of a solid object rarefies it most. This then is one reason why heat is transmitted to the terrestrial region. Another reason is that the fire which surrounds it is frequently scattered by the motion of the heavens and forcibly carried downwards.
>
> (*Mete*. 1.3, 341a12–31, Lee translation (1952), slightly modified)

Aristotle's explanation, then, is basically of a mechanical nature: the *phenomena explananda* result from the friction that occurs between the ether and the air, so there is no more need to say that the sun is by nature hot and bright than there would be

to say that a cannonball is such. There are a number of difficulties associated with this solution—more than we could possibly explore here (see Moraux 1963: 1204.54–1205.19)—but the following are particularly relevant to our concerns. (1) Whereas the *Meteorology* offers friction as an explanation of heat, the *De Caelo* has it explaining both heat and light. (2) It is far from clear that the fifth body is even compatible with such a mechanical account, since the friction Aristotle appeals to here would seem to involve some kind of opposition, which the fifth body is supposed to be free of. (3) It is also not obvious how this account should be made compatible with Aristotle's view of the heavenly bodies being embedded in a series of concentric spheres that share the earth as their common center. For on this view the sun is not moving through the heavens on its own but is rather being carried around the heavens in its celestial sphere, so that any friction that is created ought to be created along the entire sphere and not just where the sun is. If so, it ought to be equally warm and bright all day and night, which contradicts the phenomena. (4) Finally, it must be registered that Aristotle himself appears to offer alternative explanations of the generation of celestial heat. In *Meteorology* 341a30–31 (above) Aristotle offers the supplementary explanation that some fire in the *hypekkauma* (a layer of elemental fire he took to be bordering on the heavens at the upper heights of the sublunary region) might also be forced down by the celestial motions, causing the lower regions to become warmed. This explanation, at least, appears compatible with the other, but at *Meteorology* 340a25–31 he seems to accept that the sun emits rays, and that these rays—as well as their reflections off of the earth's surface—account for at least some of the heat in the sublunary region. These and other related concerns have led many scholars to the conclusion that what we find here is simply not a unified theory in full accord with the rest of Aristotle's cosmology.

Alexander of Aphrodisias (fl.c. 205 AD)

It is difficult to piece together Alexander's entire account from the evidence that has survived. While his entire commentary on the *Meteorology* is preserved (see especially 16.30–19.19), we have only fragments of his discussion of this problem from his *De Caelo* commentary, which have been preserved by Simplicius in his own commentary on the *De Caelo*, and although Simplicius provides us with generous portions, the context is somewhat polemical (despite Simplicius' general respect for Alexander), which increases the difficulty of reconstructing Alexander's views (see *in Cael.* 438.30–444.15).

Alexander seems to think that Aristotle's appeal to motion is meant to explain only the generation of heat and not light, which is produced by the celestial bodies simply in virtue of their natures, just as fire produces light (*apud* Simplicius *in Cael.* 442.4–13 which I take to be describing Alexander's view in its entirety; cf. Alexander *in Meteor.* 19.2–4 and *Mantissa* 144.19–24). This explanation of celestial light might appear to contradict *De Caelo* 2.7, 289a19–20, but it finds support elsewhere in the corpus, notably in *De Anima* 2.7, 418b11–13. The heat, according to Alexander, is generated in the *hypekkauma*, that is, the highest sublunary region bordering on the heavens, which Aristotle often refers to simply as "air," by the motion of the sun's sphere. He shows himself to be aware of a number of difficulties surrounding Aristotle's account and offers plausible, though not always entirely compelling, Aristotelian solutions to them. He appeals to considerations of relative density, for example, to account for the fact that it is the sun (rather than the sphere in which it is embedded) that produces perceptible warmth (*apud* Simplicius *in Cael.* 440.5–12), and he attempts to explain how the fifth body is

able to have an effect on the sublunary bodies by pointing to circular motion as a kind of tangible property that allows for contact (*apud* Simplicius *in Cael.* 442.22–443.18). His largest contribution, however, concerns the problem of how the sun can act on the sublunary world given that the lunar sphere, which is itself composed of the supposedly impassive fifth body, stands between them:

> There is this puzzling item: how the motion of the sun ignites and heats the air that is not in contact with the sun, since the sphere in which the moon is set is beneath the sphere of the sun, occupying an intermediate position between the solar sphere and the body subject to affection, and being itself impassive (for the sun and its motion do not come to be in contact with the body beneath the moon but rather with the impassive [body in the lunar sphere]). This might be receptive to the following solution: Even many of the bodies subject to affection in many cases do not prevent some other bodies from being affected through them even though they themselves are not affected. For not every body that is subject to affection is subject to the affection of every body that acts. For some bodies are of a nature to be affected by some, and others by others.
>
> (*in Meteor.* 18.8–17)

Alexander then points to two empirical examples of affections being transferred across a medium without the medium itself experiencing that affection: the sun can heat a body through a glass of cool water without the water being heated (*in Meteor.* 18.17–21), and a torpedo fish caught in a fisherman's net can transmit a shock to the fisherman without the net itself experiencing the shock (*in Meteor.* 18.21–24; *apud* Simplicius *in Cael.* 440.23–28). He concludes that it is reasonable to think that the manner of the sun's influence on the sublunary air *via* the lunar sphere follows a similar pattern. He further reinforces this conclusion by arguing that Aristotle might not intend to rule out all kinds of affection from the celestial body but only the kinds of affection that could lead to destruction. As a result, the lunar sphere might suffer some affection in its role as transmitting medium without compromising its everlastingness (*in Meteor.* 18.28–19.7; *apud* Simplicius *in Cael.* 436.4–438.12).

As Simplicius is quick to point out, there are still many lingering problems. Alexander, for example, does not appear to offer any satisfying explanation for why temperatures at noon are higher than at dawn, or why it is much warmer in the summer than in the winter (*in Cael.* 440.13–19). Yet Alexander's lasting contribution here is his theory that qualities can be transmitted across a medium that is itself unreceptive to these qualities. For this is not only a solution that many subsequent commentators adopt and build on, as we shall see, but it also has been shown likely to have been a major influence on Plotinus' theory of the role of a medium in vision (see Cordonier 2009). Moreover, while this theory certainly qualifies as an important innovation on top of what is in Aristotle's text, it doesn't seem to be necessarily un-Aristotelian and can be profitably compared to the more Platonically inspired innovations of the later commentators.

The Platonic Accounts of Philoponus and Olympiodorus

Both of the remaining discussions of this problem that we shall look at date to the sixth century, and both follow Alexander in re-establishing the celestial bodies as entities that emit light. Indeed, they go much further than Alexander by describing the celes-

tial bodies as emitting incorporeal rays of life that penetrate the sublunary region and illuminate the sublunary air and then pursuing a number of issues that arise from this. Moreover, as we shall see, both introduce two essentially Platonic models of explanation that are neither present in Aristotle nor appealed to by Alexander. The first of these might be called the model of vitalism. Whereas Aristotle did not explicitly invoke the vitality of the universe to explain any cosmological phenomena, Plato had famously articulated a theory in his *Timaeus* according to which the universe was a living thing composed of body and soul. By adopting Plato's vitalistic vision of the cosmos as an *explanatory* model of cosmology, these later authors are committed to explaining at least some cosmological phenomena as resulting from the life activities of the cosmos. Second, with Platonism comes also the fundamental metaphysics of emanation and reversion, which was seen as a metaphysical explanatory model whose domain of application extended all the way to the sensible world. Since emanation and reversion will have been discussed elsewhere in this volume, we may be brief here. Both of these authors share the Neoplatonic view that there is one principle, sometimes called the One or the Good, arching over all else. The One, by virtue of the activity of being itself, produces an inferior image of itself as a necessary by-product. This is procession. This image, then, desires its source and original and seeks to return to it. This is reversion. It is by attempting to turn back to the One that this image becomes what it truly is, namely Intellect. Importantly, the Intellect's reversion can also be described as a kind of reception. By turning back and facing its source, the Intellect becomes, as it were, able to take in the content that is proceeding from the One. In other words, Intellect's own activity of being is sustained by its reversion to the One, and in this way the cycle starts again, with another inferior image proceeding from the Intellect. The standard examples given by Plotinus and others of procession are fire and light. Fire, just by the activity of being itself, sends out another activity that is like it but inferior to it, namely the heat it emits. What deserves some emphasis here is that fire and light are not presented as merely *analogous* cases; they are actual examples of procession. In other words, the model of procession and reversion is one that also serves to explain certain features of the sensible world, and there are in particular five aspects of this explanatory model that will be seen to be relevant below: the desire to return to one's source, the reception of an activity, the subsequent emission of a like activity, the replication of this process, and the successive diminution of the resulting activities. As we shall see, just as these later commentators distinguish themselves from Alexander by employing these Platonic models, so too do they distinguish themselves from each other rather markedly by making use of these models in strikingly different ways and thus developing their own unique theories.

Philoponus

Determining Philoponus' considered views on certain issues runs up against a wholly different set of obstacles than in Alexander's case. First, Philoponus' commentaries on Aristotle are prime examples of *apo phōnēs* commentaries (see above), which in this case means that he is largely writing up lectures from his teacher Ammonius, though he doesn't always acknowledge this. Moreover, over time Philoponus develops a more critical attitude towards Aristotle's views on the everlastingness of the cosmos and thus on the composition of the heavens, both of which contradict his Christian beliefs. Thus, in his commentary on the *Meteorology* as well as in his *Against Proclus on the*

Everlastingness of the World—both later works (composed after 529 AD, see Verrycken 1990b: 243ff.)—he attacks Aristotle's account of the heavens (*in Meteor.* 40, 26ff.; *Against Proclus* passim), though it should be noted that even if Philoponus does oppose Aristotle on some central issues in his commentary on the *Meteorology*, most of the commentary is not polemical and so fulfills the allegiance requirement discussed above. Yet it is not the *Meteorology* commentary that concerns us here but his commentary on the *De Anima* (composed c. 510–515 AD)—also explicitly called an *apo phōnēs* commentary "with additions of his [viz. Philoponus'] own" (*in De an.* 1.1–3). For here we find an interesting digression on celestial light as part of the comments on Aristotle's definition of light as the actuality of the transparent at *De an.* 418b9–10, and we have good reason to attribute this digression to Philoponus (rather than to his teacher Ammonius) on account of the similarities this theory has to his famous impetus theory (Wildberg 1988: 175–81). Thus, in what follows I shall be focusing solely on Philoponus as the author of this digression.

Philoponus begins by famously reinventing Aristotle's notion of light as an incorporeal activity. As this has been the subject of much discussion already (Sambursky 1958; de Groot 1983; Sorabji 1987: 26–30; Wildberg 1988: 175–81), here a brief summary will do. Whereas for Aristotle this activity referred to the static actuality of the transparent body, for Philoponus it becomes a *kinetic* ray that proceeds out from its source. Moreover, he subjects this kinetic activity or ray to the laws of geometrical optics, namely: (1) This incorporeal activity travels in a straight line (*in De an.* 331.5–7); (2) Although this activity travels from A to B instantaneously, as one would expect of an incorporeal activity, its activity is still best characterized as a *vector* from A to B (as opposed to a *line* AB). That is to say, the activity's presence at point C (between A and B) is causally prior to its presence at point B (*in De an.* 330.11–14); and (3) this incorporeal activity reflects upon smooth surfaces at equal angles (*in De an.* 331.7).

On account of all of this, the explanation of solar light is no longer a difficult task; it is simply accounted for by the incorporeal rays sent out from the sun (*in De an.* 329.36–37). In order to account for the sun's heat, however, Philoponus invokes the Platonic model of vitality:

> How will the activity of what is not hot heat? […] I reply to this that just as by the agency of the soul, though it is not hot, a sort of vital activity of life occurs in the body, which stirs up the innate hot and brings the animal to life, and when the soul withdraws, immediately the innate hot is quenched too, so also, I say, from the sun some vital activity is produced through light in the air, and this stirs the innate hot in the air and heats it through. And just as the spirited power of the soul is not itself hot, but when it is stirred it heats thoroughly the blood around the heart, and likewise the intelligence heats, though it is an incorporeal activity of soul, so too it is nothing unreasonable that the sun, though it is not hot, by its vital activity, which is light, should stir the heat in the air and heat it thoroughly.
>
> (*in De an.* 332.5–17. W. Charlton translation, slightly revised)

Philoponus explicitly rejects Aristotle's mechanical explanation of celestial heat (*in De an.* 332.18–23) and replaces it with a more biological model that likens the sun's activity in the cosmos to the soul's activity in the body. Just as light was explained by saying that air as a transparent body contains a luminous power that is actualized by the kinetic

activity that is the ray travelling from the sun, so too is heat explained by saying that this air contains innate heat that is "stirred" by the activity of the sun's rays. Yet this analogy to living things also serves to underline a problem not unlike the Mind–Body problem: How are we to understand the manner of interaction between these incorporeal soul-like activities on the one hand and physical bodies on the other? As we saw above, Philoponus insists that these activities obey the laws of geometrical optics, including reflecting at equal angles, and a look at his explanation of how an incorporeal kinetic activity can 'reflect' off of a body offers a helpful entry point into this issue of corporeal–incorporeal relations. Philoponus, of course, realizes the absurdity of the suggestion that incorporeal rays could simply bounce off of corporeal surfaces (*in De an.* 333.36–334.3), but he has an alternative to suggest:

> In the way in which it is the nature of the moon, when it receives activities from the sun and is lit, itself to act in return through the brightness of its body and light things here, so too there are very many other things which are by nature such that having received the activities of light they themselves act in return, for instance, water, glass, silver, bronze and in a word everything smooth and polished. When, therefore, it is said that the activity is bent back from smooth bodies, nothing else is meant but that when such bodies *receive* the activities of light and of the objects of sight, they do not make to bend those very same activities they received, but it is their nature themselves *to act in return* (*antenergein*) with *similar* activities.
>
> (*in De an.* 334.17–25 Charlton translation; cf. *in De an.* 333.12–16)

In short, there is no genuine mechanical "reflection" here. Rather, what we call "reflection" is in fact the reception of one activity and emission of another, distinct activity that is like the one it received, in accordance with the laws of optical geometry. Philoponus even coins a term for this—*antenergein*. In this way, he is able to account for the phenomenon that it is hotter at midday, since the air between the sun and the earth is vitalized and heated by two separate activities, one proceeding from the sun and one emitted from the earth's surface (*in De an.* 332.17–22). Further, if we look up from the ground to the space in between the sun and the earth, we shall see that in Philoponus' view this explanation of "reflection" is in fact just a special case of a more general law that states that this kinetic activity of light always proceeds by means of the underlying transparent body's receiving it and emitting another activity that is like it:

> And the activity of the Sun does not travel immediately to the things that are last, but the things that are near and affected first are able in their turn also to act with a like activity upon what is capable of receiving [that activity].
>
> (*in De an.* 330.11–14 Charlton translation slightly revised).

Both explanations share central common features not just with each other, but also with the Platonic model of procession and reversion. In each case Philoponus appeals to a body's ability to *receive* an activity and consequently to *send out another similar activity*, and he expects this process to *replicate* itself as well. Moreover, Philoponus seems to acknowledge that this process ultimately *diminishes* the ray's intensity—if we might speak of a single ray proceeding from the light source to its ultimate destination (cf. *in De an.* 335.4–7; 262. 20–21; 392.20ff). Thus, Philoponus is not only asking questions

that neither Aristotle nor Alexander considered, he is also providing ingenious solutions that call on his Platonic background. This, therefore, is a good example of the way in which fruitful harmonization is being achieved throughout these commentaries.

Olympiodorus

By comparing Philoponus' account with that of Olympiodorus in his commentary on Aristotle's *Meteorology* (dated after 565 AD, Westerink 1971), we can witness the generosity of the models of vitality and of procession and reversion. For Olympiodorus also applies both models but with radically different results. Like Philoponus, Olympiodorus accepts that the sun, like the other celestial bodies, emits incorporeal rays of light that penetrate into the sublunary region, but when it comes to the generation of heat, he is not prepared to entirely ignore Aristotle's appeal to friction as Philoponus was. In his fifth lesson (*praxis*: see above) on the *Meteorology*, a lesson devoted to 341a9–36 and running a full five pages of his commentary (*in Meteor*. 31.1–35.27), he begins the general discussion (*theōria*), which occupies most of the lesson (31.3–34.6), by explicitly acknowledging and rejecting the kind of metaphysical vitalism that Philoponus had proposed:

> It was possible for Aristotle to solve this difficulty in this way, that there is nothing strange in what is not hot heating. For although everything hot heats, not everything that heats is hot. For behold that motion heats, although it itself is not hot, and the irrational soul, although it is not hot, heats when it gets angry, and according to Plato the figures, although not hot, heat. For in the *Timaeus* Plato says that fire does not heat *qua* fire, but by virtue of the pyramidal figures in it out of which it is composed. For these figures are good at dividing on account of their sharp ends. And they are thought to burn by virtue of their easily making divisions. Hence we consider the nettle, too, to be hot on account of its making a kind of division. Aristotle, therefore, could have solved the difficulty in this manner, but he didn't do this. Rather, disregarding this line of thought, he examines what the celestial bodies do such that they heat us.
>
> (Olympiodorus *in Meteor*. 31.5–16)

In fact, as Olympiodorus makes clear elsewhere, he also subscribes to Philoponus' idea that the air is simply heated by the vital power of the sun's rays (*in Meteor*. 24.8–10), but he does think that this is what Aristotle has in mind here, given Aristotle's invocation of chafing and motion. It should be said, however, that even if Olympiodorus here prefers to stay much closer to the text, elsewhere he is quite prepared to point out the unsoundness of some of Aristotle arguments (for example, *in Meteor*. 33.20). Olympiodorus points to a total of three different causes of sublunary heat, two of which are drawn directly from the Aristotle's text: (i) the co-revolution of the *hypekkauma* and the terrestrial air with the celestial spheres (*in Meteor*. 31.17–32.7; cf. *Mete*. 1.3, 341a13–30); (ii) the warm substance of the *hypekkauma* being squeezed out and forced down (*in Meteor*. 33.16–18; cf. Arist. *Mete*. 1.3, 341a30–31). It is, however, the third cause that interests us here. For Olympiodorus also (iii) appeals to the reflection of solar rays to account for the increased daytime temperatures, and he, too, does so by invoking the models of vitality and of procession and reversion. Yet as we can see in the following regrettably opaque passage, his account differs considerably from Philoponus':

> For when the sun's rays are reflected back they become causes of great heat in the day—though the rays themselves are not reflected back, as one might think. For how could the rays, being incorporeal, be reflected? Rather they illuminate the air, and this air, being made alive and moving hyper-naturally, reflects, desiring to partake of still more life. It is then by being reflected and moving back and forth (for this sense of *polueidōs*, cf. the Stephanus passage cited below) that [the air] is warmed. And reflection does not occur unless these three conditions coincide: (a) smoothness of the underlying body so that the air does not refract in its hollows; (b) density [of the underlying body] so that the air does not pass through it; but surely also (c) narrowness [is required—not for reflection *per se* but for heating –] so that the air, by being compressed in between and desiring, as it were, the brightness of some other solar light, moves back and forth.
>
> (*in Meteor.* 32.11–20)

Not only is for Olympiodorus the effect of the vital power of the incorporeal solar rays that the air is put in motion (rather than simply making it warm, as it was for Philoponus), but he also emphasizes rather different points in his application of the model of emanation and reversion. The idea here seems to be that the air, having received life from the solar ray, now desires the source of that life—namely the ray itself, and since the ray is moving down towards the surface of the earth, the air also acquires this motion. We may note as a partial proof of this interpretation of Olympiodorus' remarks that Simplicius also sees the air acquiring a downward motion (*In De cael.* 441, 2–13), and that a common Neoplatonic explanation of celestial motion was that the celestial bodies desired and chased after the soul in the heavens, which itself was moving in a circle (for example, Plotinus *Ennead* II.2.1 and IV.4.16), which is analogous to what is being described here. (Moreover, if we were to understand the hyper-natural motion to be an upward motion back to the sun, Olympiodorus' three conditions for reflection would become irrelevant.) Thus, Olympiodorus' application of this model puts all of the emphasis on the reception of an activity and the desire to return to the source of that activity. We might say that whereas Philoponus stressed the aspects of reception and procession in his account, for Olympiodorus it is reception and reversion that are key.

Once the air has acquired this downward motion, the rest of Olympiodorus' explanation returns to the more mechanical lines that Aristotle had proposed. The air, due to its downward motion, eventually strikes the surface of the earth and at midday, assuming the earth's surface there is sufficiently smooth and dense, is reflected straight back. In this way the air moving downwards will chafe against the air that has been reflected back upwards, and so the "solar" heat is generated (*in Meteor.* 24.8–10; cf. *in Meteor.* 35.17–19). Thus, Olympiodorus preserves the mechanical nature of Aristotle's explanation, but whereas Aristotle seemed to suggest that the celestial things were somehow directly involved in the chafing process, Olympiodorus relocates the chafing—a process in which now only air is involved—to deep within the sublunary world, thus safely restoring the impassivity of the celestial things.

It is worth noting that just as Alexander's account went on to influence Plotinus' account of sensation, and Philoponus' views gave birth to his own impetus theory, so too does Olympiodorus' account appear to have an afterlife of its own. At least, some medical explanations of increased body temperature found in Stephanus (for example,

his commentary on the Hippocratic aphorisms, CMG XI 1,3,3: 70, 34–43 Westerink 1985), who is known to have been influenced by Olympiodorus (Westerink 1990: xl–xli; Watts 2006: 257), and Theophilus (*Commentarii in Hippocratis* 2.281, 1–6 Dietz) bear some marked resemblances to the theory we find here.

This single case study, brief though it is, illustrates well a number of points that were set out in the historical overview. We have now seen that all of these commentators are concerned to develop interpretations of the text that are exegetically and above all philosophically compelling, and this involves addressing empirical phenomena, textual tensions and metaphysical questions that Aristotle himself does not pursue. In contrast to Alexander of Aphrodisias, the commentators of the third period introduced Platonic models to interpret Aristotle's remarks, and they did so not primarily in order to harmonize Aristotle's theory to Plato's—Plato himself, for example, does not address the issue of why it is hotter during the day—but rather simply to provide some reasonable account of how incorporeal rays might be thought to reflect off of a corporeal surface. Finally, this case study puts on view how commentating on this issue allowed each of these authors to make an important and original contribution to philosophy and science.

References and further reading

More details of the Ancient Commentators on Aristotle Project, based at King's College London, and a list of all the currently available volumes can be found here:
http://www.kcl.ac.uk/artshums/depts/philosophy/research/commentators/index.aspx

Adamson, P., H. Baltussen and M. W. F. Stone (eds.) (2004) *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, 2 vols. Supplement vol. 83 of the *Bulletin of the Institute of Classical Studies*. London: ICS.

Alberti, A. and R. W. Sharples (eds.) (1999) *Aspasius: The Earliest Extant Commentary on Aristotle's Ethics*, Berlin, New York: De Gruyter.

Algra, K., J. Barnes, J. Mansfeld and M. Schofield (eds.) (1999) *The Cambridge History of Hellenistic Philosophy*, Cambridge: Cambridge University Press.

Ballériaux, O. (1996) "Eugénios, père de Thémistios et philosophe néoplatonicien," *L'Antiquité classique* 65: 135–160.

Baltussen, H. (2007) "From Polemic to Exegesis. The Ancient Philosophical Commentary," *Poetics Today* 28.2: 247–81.

Barnes, J. (1997) "Aristotle in Rome," in M. Griffin and J. Barnes (eds.) (1997), 1–69.

Barnes, J. (1999) "An Introduction to Aspasius," in A. Alberti and R. W. Sharples (eds.) (1999): 1–50.

Browning, R. (1990) "An Unpublished Funeral Oration of Anna Commena," in R. Sorabji (ed.) *Aristotle Transformed*, London: Duckworth: 393–406.

Charlton, W. (2005) *Philoponus. On Aristotle on the Soul 2.7–12*, London: Duckworth.

Cordonier, V. (2009) "De la transmission à la sympathie: Plotin et la désaffection du milieu perceptif," *Philosophie antique* 9: 35–69.

D'Ancona Costa, C. (2002) "Commenting on Aristotle: From Late Antiquity to the Arab Aristotelianism," in W. Geerlings and C. Schulze (eds.) (2002): 201–51.

Falcon, A. (2009), "Commentators on Aristotle," in E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy (Fall 2009 Edition)*, URL: http://plato.stanford.edu/archives/fall2009/entries/aristotle-commentators/.

Fazzo, S. (2004) "Aristotelianism as a Commentary Tradition," in P. Adamson et al. (2004): 1–19.

Festugière, A.-J. (1963) "Modes de composition des Commentaires de Proclus," *Museum Helveticum* 20: 77–100.

Frede, M. (1999) "Epilogue," in K. Algra, J. Barnes, J. Mansfeld and M. Schofield (eds.) (1999): 771–97.

Geerlings, W. and C. Schulze (eds.) (2002) *Der Kommentar in Antike und Mittelalter: Beiträge zu seiner Erforschung*, Leiden: Brill.

Gerson, L. P. (2006) "The Harmony of Aristotle and Plato according to Neoplatonism," in Tarrant and Baltzy (eds.) (2006): 195–221.
Gerson, L. P. (ed.) (2010) *The Cambridge History of Philosophy in Late Antiquity*, 2 vols, Cambridge: Cambridge University Press.
Gill, M. L. and P. Pellegrin (eds.) (2006) *A Companion to Ancient Philosophy*, Oxford: Blackwell.
Gottschalk, H. B. (1990) "The Earliest Aristotelian Commentators," in R. Sorabji (ed.) (1990): 55–81.
Griffin, M. and J. Barnes (eds.) (1997) *Philosophia Togata II. Essays on Philosophy and Roman Society*, Oxford: Oxford University Press.
de Groot, J. C. (1983) "Philoponus on *De Anima* II.5, *Physics* III.3, and the Propagation of Light," *Phronesis* 28.2: 177–96.
Goulet, R. (ed.) (2003) *Dictionnaire des philosophes antiques*, Paris: Flamand et Maroun Aouad, C.N.R.S.-Éditions.
Guthrie, W. K. C. (1939) *Aristotle in Twenty-Three Volumes. VI On the Heavens*, Cambridge, Massachusetts: Harvard University Press.
Hadot, I. (1985) "La division néoplatonicienne des écrits d'Aristote," in J. Wiesner (ed.) (1985): 249–85.
Hadot, I. (1990) "The Life and Work of Simplicius in Greek and Arabic Sources," in R. Sorabji (1990) (ed.): 275–303.
Hadot, I. (2002) "Der fortlaufende philosophische Kommentar," in W. Geerlings and C. Schulze (eds.) (2002): 184–99.
Hoffmann, P. (2006) "What was a Commentary in Late Antiquity? The Example of the Neoplatonic Commentators," in M. L. Gill and P. Pellegrin (eds.) (2006): 597–622.
Ierodiakonou, K., and B. Bydén (2008) "Byzantine Philosophy," in E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy (Winter 2008 Edition)*, available at http://plato.stanford.edu/archives/win2008/entries/byzantine-philosophy/.
Karamanolis, G. E. (2006) *Plato and Aristotle in Agreement? Platonists on Aristotle From Antiochus to Porphyry*, Oxford: Oxford University Press.
Lee, H. D. P. (1952) *Aristotle in Twenty-Three Volumes. VII Meteorologic*, Cambridge, Massachusetts: Harvard University Press.
Leggatt, S. (1995) *Aristotle. On the Heavens I and II*, Warminster: Aris & Phillips.
Moraux, P. (1963) "Quinta Essentia," in *Pauly-Wissowa, Realencyclopädie der classischen Alterumswissenschaft* 24: 1171–264.
Moraux, P. (1973–2001) *Der Aristotelismus bei den Griechen*, Vol. 1 (1973), vol. 2 (1984), vol. 3 (2001). Berlin, New York: De Gruyter.
Rashed, M. (2007) *Essentialisme: Alexandre d'Aphrodise entre logique, physique et cosmologie*, Berlin: De Gruyter.
Richard, M. (1950) "ΑΠΟ ΦΩΝΗΣ," *Byzantion* 20: 191–222.
Sambursky, S. (1958) "Philoponus' Interpretation of Aristotle's theory of light," *Osiris* 13: 114–26.
Scholten, C. (1996) *Antike Naturphilosophie und christliche Kosmologie in der Schrift "de opificio Mundi" des Johannes Philoponus*, Berlin, New York: De Gruyter.
Sharples, R. W. (1987) "Alexander of Aphrodisias: scholasticism and innovation," in W. Haase (ed.), *Aufstieg und Niedergang der römischen Welt* II.36.2. Berlin: de Gruyter: 1176–243.
Smith, A. (1993) *Porphyrii Philosophii Fragmenta*, Stuttgart, Leipzig: Teubner.
Sorabji, R. (1987) "John Philoponus," in R. Sorabji (ed.) (1987): 1–40.
Sorabji, R. (ed.) (1987) *Philoponus and the Rejection of Aristotelian Science*, London: Duckworth.
Sorabji, R. (ed.) (1990) *Aristotle Transformed*, London: Duckworth.
Sorabji, R. (1990) "The Ancient Commentators on Aristotle," in R. Sorabji (ed.) (1990): 1–30.
Sorabji, R. (1999) "Aspasius on Emotion," in A. Alberti and R. W. Sharples (eds.) (1999): 96–106.
Sorabji, R. (2005) *The Philosophy of the Commentators 200–600AD. A Sourcebook*, 3 volumes. London: Duckworth.
Sorabji, R. (2006) "The Transformation of Plato and Aristotle," in Tarrant and Baltzy (eds.) (2006): 185–93.
Tarrant, H. and D. Baltzy (eds.) (2006) *Reading Plato in Antiquity*, London: Duckworth.
Tuominen, M. (2009) *The Ancient Commentators on Plato and Aristotle*, Stocksfield: Acumen.
Urmson, J. O. and L. Siorvanes (1992) *Simplicius. Corollaries on Place and Time*, London: Duckworth.
Verrycken, K. (1990a) "The Metaphysics of Ammonius son of Hermeias," in R. Sorabji (ed.) (1990): 199–231.
Verrycken, K. (1990b) "The Development of Philoponus' Thought and Its Chronology," in R. Sorabji (ed.) (1990): 233–74.

Watts, E. J. (2006) *City and School in Late Antique Athens and Alexandria*, Berkeley, Los Angeles, London: University of California Press.
Westerink, L. G. (1971) "Ein astrologisches Kolleg aus dem Jahre 564," *Byzantinische Zeitschrift* 64: 6–21.
Westerink, L. G. (1985) *Stephanus of Athens: Commentary on Hippocrates' Aphorisms I*, CMG XI.1.3.1, Berlin: Akademie-Verlag.
Westerink, L. G. (1990) *Prolégomènes à la philosophie de Platon*, Paris: Les Belles Lettres.
Wiesner, J. (ed.) (1985) *Aristoteles.Werke und Wirkung. Band 2: Kommentierung, Überlieferung, Nachleben*, Berlin: De Gruyter.
Wildberg, C. (1988) *John Philoponus' Criticism of Aristotle's Theory of Aether*, Berlin, New York: De Gruyter.
Wittwer, R. (1999) "Aspasian Lemmatology," in A. Alberti and R. W. Sharples (eds.) (1999): 51–84.

Related chapters

18. Reading Aristotle
22. Aristotle's philosophy of nature
42. Plotinus
43. Porphyry and Iamblichus
44. Syrianus, Proclus, and Damascius
47. The Arabic reception of Greek philosophy

46
ANCIENT PHILOSOPHY IN CHRISTIAN SOURCES

Mark Edwards

In all but a handful of cases, the most seminal thinkers of the ancient world, or at least the most seminal of their writings, are known to us only from the reports of others. For most of us this means in fact that we know them from modern volumes in which the "fragments" of a philosopher have been exhumed with patient labor from a vast necropolis of florilegia, doxographies and controversial writings, which are almost invariably the work of minds of lesser acumen. To rescue the information from the bias of our informants is the usual aim of scholarship, and need not be entirely chimerical; it is not, however, as easy as reclaiming gold from a bank, where its value and luster remain untarnished, and is a great deal more like trying to distil the natural fragrance of a pressed flower from the odor of the pages that enclose it. The aim of the present chapter is to show what odors are likely to cling to the information gathered from Christian authors, who will inevitably be writing with an animus against heretics whom they believe to be the progeny of the philosophers, if not against the philosophers themselves. It will not be another history of the "philosophy of the Church Fathers", but an inventory of references and quotations which, by being collected in one place, will reveal how much particular informants knew of their sources, and what whims or partialities may have colored their estimation. If the result will not enable us to reconstruct the thoughts of Empedocles, Zeno or Porphyry with greater accuracy and confidence, it may at least deter us from making the same immodest use of modest data for which we rightly blame our Christian witnesses.

Second century

When Justin Martyr recounts his perambulations as a student of philosophy (Van Winden 1971), we may wish that he had said more of the "Socratics" and "Theoretics" whom he encountered (*Dialogue with Trypho* 1–2). He describes the Platonism which he himself embraced as a quest for the vision of a transcendent logos (*Dialogue with Trypho* 3). Only a Christian would have put it so, and as an apologist after conversion he continues to baptize his old master, finding an adumbration of the Cross in the chiastic form of the world-soul in the *Timaeus* (*First Apology* 60) and tracing the maxim "the blame is with the chooser; God is blameless" to texts from the Septuagint which insist on the culpability of the sinner (*First Apology* 44). This last citation from Plato is found in other apologists of the Antonine era; the pronouncement that "it is difficult to find

out the father of all and impossible to declare him to mortals" (*Timaeus* 28c) is known to almost every Christian who has heard of Plato. It is not necessary to follow Daniélou (1973: 107–129) in supposing that a written florilegium supplied them with their limited fund of prooftexts; if one existed, it must have drawn on Xenophon's *Memorabilia* (4.3), which supplies both Barnabas (*Epistle* 5) and Minucius Felix (*Octavius* 32) with the argument that we cannot hope to see God when our eyes cannot even bear the sun. An unavowed reminiscence of Xenophanes (B24) in Irenaeus—"he thinks as a whole, he perceives as a whole" (*Against Heresies* 2.13.3)—suggests that first theologians of the Church had more acquaintance with philosophy than they reveal by explicit quotation. Nevertheless, we may reasonably assume that they quote little because they had read little; a cursory review of Greek opinions on the nature of God at *Octavius* 19 is barely enough to prove that Minucius had consulted a written doxography, let alone that he knew the originals. The ostentatious "barbarism" of Tatian, who draws his *archai* or first principles from Genesis 1.1 (*Oration* 5) and pours scurrilities on the lives and doctrines of all philosophers, may represent a norm. It is Clement of Alexandria who undertakes the first exhaustive census of passages from Greek philosophy which vindicate Christian teaching, and in doing so preserves a number of texts which have otherwise remained unknown.

Clement of Alexandria (c. 155–c. 220)

Clement is more than an apologist, but the purpose of his *Stromateis* is concealed from us by the loss of its opening pages. It is clear that he is engaged in a methodical quest for analogues to the doctrines of the Church in the poets, tragedians and philosophers of antiquity; it is not so clear whether those whom he hoped to edify were Greek scoffers or unphilosophical Christians. As evidence to substantiate both theses can be discovered in the rest of the *Stromateis*, we may presume that both have merit; he is never so sympathetic to the philosophers, however, as to allow them a knowledge of god without assistance from other races or from prophecy. While he reckons Orpheus among the earliest sages (1.59.1, 1.66.1), he follows custom in reckoning the Milesian and the Italic schools, the oldest, the first commencing with Thales, the second with Pythagoras (1.62.1). Thales is succeeded by Anaximander (1.6.3.1), while Xenophanes, as the tutor of Parmenides, is at the head of the Eleatic line (1.64.3). According to some, this terminated in Epicurus (1.64.4); it is from Pythagoras, by way of Socrates, that one can derive the Cynics, Plato, Aristotle, the Stoa and no fewer than three Academic traditions—old, middle and new (1.63.4–6), The majority of these figures, he adds, were avowedly indebted to barbarians (1.66–69) or the Sibyl (1.70.2–3). The dates that Greek chronographers assign to them show that all were greatly inferior to Moses in antiquity, and hence also in authority; in Book Five Clement undertakes to prove that knowledge of God among the Greeks was the fruit of plagiarism rather than perspicacity, and a division of philosophy into four branches—the nomothetic, the ethical, the hierurgic and the theological—is attributed at *Stromateis* 1.176.1 to Moses himself, although the true source would appear to be Philo's *Life of Moses* 2.2.46.

From this indictment Plato is not excluded, since of all the pagan philosophers he is the one whose teaching coincides most frequently with the word of revelation. His theory of an intellectual universe is purloined from Moses' vision of the heavens (5.93.4–5), while but for the biblical narrative of the fashioning of Adam he might not have divined that the body is made from earth (5.94.3). Testimonies from this illustrious teacher are

always welcome, even if one has to scour the *Laws* for a rare commendation of humility (2.132.3, citing *Laws* 716c). In all 33 dialogues are quoted, yet even the united suffrage of Plato and Aristotle with regard to the divine origin of intellect is of rhetorical rather than probative value to Clement himself (5.58.1). Aristotle, in Clement's view, does well when he acknowledges theology as a discipline superior to physics (1.176.2–3) and when he contrasts the mechanical acts of brutes with the human pursuit of goals (5.86.2). Knowledge of the esoteric works, however, is poorly attested in the *Stromateis*, and Clement cannot follow the exoteric works in positing a fifth element, in characterizing God as the soul of the world or in limiting providence to affairs below the moon (5.58.3; cf. Clark 1977).

Of Epicurus he speaks less contumeliously than most, applauding his dictum that philosophy is not a proper study for the young (4.69.2; cf. Diogenes Laërtius 10.122). Of course he cannot stomach the atomist's denial of providence (4.78.1; 5.90.2), and quotes with disdain his maxim that the end of the philosophic life is pleasure (2.119.4). The Stoics are collectively censured for their belief that God is a body (1.51.1); on the other hand, Zeno's aphorism that the ideal commonwealth needs no temples is repeated with approbation (5.76.1), as are sayings of Cleanthes on the co-operation of happiness and virtue (2.131.3). Chrysippus, on the other hand, appears to be only a name to this Christian bibliophile. At the same time he is our source for many quotations from Heraclitus, a putative forebear of the Stoics (5.105.1). He makes a catena of sayings which describe the cosmic elements from a protean fire (5.104.1–5) When his aim is to construct an invidious pedigree for Marcion, who had attributed the physical creation to a lesser god, he juxtaposes Heraclitus and Empedocles as purveyors of the false doctrine that life in the body is death to the soul (3.14.1–2).

Three excerpts from Xenophanes in Clement are unattested before him or in pagan sources. They are the only remaining fragments in which Xenophanes derides the representation of the gods in human form (*Stromateis* 7.22.1 = DK B16) and asseverates that one god, greatest of gods and men, has neither form nor body (5.109.3 = B15). Iconoclasm was rare in archaic literature, which, even when it is hostile both to painting and to poetic misrepresentations of the gods, does not discuss the utility of religious images. When we add that these putative gleanings from Xenophanes are not always metrical and that the noun *demas* (body) occurs in them twice (5.109.3 and 5.109.2 + B16) but not elsewhere in the remnants of his poetry, the suspicion that Clement has been misled by a forger is not easily laid to rest (Edwards, 1991). The argument that is supposed to destroy this thesis—that a Christian forger would have made Xenophanes a strict monotheist—is in fact no argument, for Clement himself, in a reminiscence of Exodus 15.1, is prepared to speak of his one God as the captain of the host of gods (7.5.6, after citing Xenophanes B24).

Hippolytus of Rome (c. 160–c. 235)

Hippolytus was the leader of a Roman congregation at the beginning of the third century. The prolific corpus attributed to him includes a *Refutation of all Heresies*, in which every aberrant teaching that had arisen before his own generation is traced to the errors of a Greek philosopher. In the first book of ten, which appears to have circulated as a discrete work under the title *Philosophumena*, he undertakes a synopsis of all philosophical systems from Thales to the Skeptics, appending chapters on the gymnosophists, the druids and the Muses, and opining that the pagan schools were not only more original

but more reverent than their latter-day plagiarists (see further Mansfeld 1992). He is acquainted with a conventional division of philosophy into physics, ethics and logic or dialectics, which originates with the Stoics (*Refutation* 1.5.1); less conventional is his allocation of each philosopher to one of these three branches, though, since all his specimens in the "physical" category are older than Plato, he may have been guided by Plato's own distinction between those thinkers who perceive and those who fail to perceive the necessity of explaining the world with respect to final causes. Where his information regarding a "physical" philosopher is abundant, his arrangement resembles the plan of Genesis 1, according to which God first asserts his mastery of a chaotic substrate, then divides earth from heaven and the waters from the land, and, after setting lights in the firmament and causing the living creatures to come forth below, at last creates the male and female of the human species, imbuing the protoplast with a human soul.

Thus we are told of Thales, first that he made water the *archē* or ground of all things, and next that he was a diligent astronomer (*Refutation* 1.1); Pythagoras is said first to have identified God with the monad (1.2.2), then to have derived from this the harmony of the world and the motions of the heavenly bodies (*loc. cit.*), next to have divided number into male and female (1.2.5–7), and finally to have taught the transmigration of the soul (1.2.11). Returning to Anaximander, the Milesian successor of Thales, Hippolytus reports first his belief that the infinite is the *archē* of all things (1.6.1), then his theory that earth is suspended in space without support (1.6.3), then his speculations on the origin of celestial bodies (1.6.4–5), and after this (more summarily) his account of the evolution of humans from other living forms (1.6.6). The leading tenets of Anaximenes are found to be that all things come from air (1.7.1–3), that the earth is flat and that the stars never pass beneath it in their rotation (1.6.4–6). Anaxagoras is said to maintain that all four elements are precipitates of a primordial mixture (1.8.1–2) and that the earth is flat (1.8.3); an account of his theories regarding the discrimination of waters culminates in the emergence of male and female (1.8.5–12). To Archelaus Hippolytus ascribes an account of the separation of water, earth and air from the aboriginal matrix (1.9.1–3), together with odd notions regarding the action of the sun (1.9.4). He also made mud the cradle of life (1.9.5) and did not admit that human beings are intellectually superior to brutes (1.9.6). Parmenides and the atomists Democritus and Leucippus are all but passed over (1.11–13), and then Xenophanes is introduced as one who makes God the author of all (1.14.2), but mingles his conjectures on the origin of the sun and the earth with a demonstration that land and sea have never kept fixed boundaries (1.15.5) and that every species, including ours, suffers periodic extinction (1.15.6). Cursory notices of Ecphantus and Hippon complete the inventory of "physicists" (1.16–17), and Socrates, also briefly handled (1.18), marks the transition to ethical philosophy.

Empedocles, almost neglected in the first book, comes into his own in the seventh as the precursor of Marcion, the most seductive heretic of the second century (Osborne 1987: 97–108). Marcion was generally agreed to have contrasted the mercy of Christ with the severity of the Creator; Hippolytus alleges that he characterized the latter as an "evil" god, the father of Christ as his "good" antagonist, and Christ on earth as a mediator who, being unbegotten, partook of neither the good nor the evil nature (*Refutation* 7.29.1; 7.31.6). This is an unusual representation of Marcion, and it is prefaced by an account of the Empedoclean system which differs in some particulars from other ancient notices. Hippolytus states that he posited three *archai*, consisting of three antithetical pairs. Water and earth are hylic or material *arkhai*, fire and air instrumental, love and

strife the efficient forces which subject the material principles to these instruments (7.29.4–7). Since it is the work of love to subsume all things in one, and that of strife to undo their union, it is to strife that we owe the differentiation of creatures, and thus we can say of Empedocles, as of Marcion, that his Creator is malign (7.29.9). According to Hippolytus, it is because Empedoclean love proscribes all killing that Marcion espoused vegetarianism (7.29.22–226; 7.30.3). Hippolytus attributes to Empedocles the teaching that phases of unity under love are succeeded by centrifugal phases as strife prevails (7.29.12); the sundering of this primordial unity is experienced by the soul, or *daimōn*, as a surrender to strife and a loss of integrity, to be expiated by a long cycle of punitive transmigration (7.29.23–24). This fusion of demonology and cosmology suggests that he credited Empedocles with one poem rather than two, but his tendentious purpose impairs his credibility as a witness. It is hard to make anything of his testimony that Empedocles also postulates a mediating principle between love and strife—a cosmic logos, manifesting itself in souls as *phronēsis* (7.29.25). Since this is as much an anomaly as his ascription of a third principle to Marcion, we cannot say whether the heretic has been assimilated to the philosopher or the philosopher to the heretic; and it may be that Hippolytus simply chanced upon two accounts which he found homologous.

The chapter on Plato in Book 1—much the longest—is punctuated by extracts from the dialogues which are probably drawn, like the commentary which accompanies them, from the pedagogic handbooks of the school. In agreement with Alcinous and Apuleius, he states that Plato posited three *arkhai:* god, the forms or ideas and matter (1.19.1). Matter he characterizes—like Plato himself, but also with an adumbration of heresies that he will subsequently expose—as the unconditioned (*askhēmatistos*) nurse of receptacle of the forms (1.19.3; cf. 5.7.18). Like the subtler handbooks, he explains that the world is eternal insofar as matter itself is coeval with god, but perishable insofar as bodies are prone to vicissitude and decay (1.19.4). A quotation from the *Laws* (715e7) is adduced to illustrate Plato's belief in a single divinity (1.19.6), but others follow which show that he also acknowledged lesser gods and equated the highest god with Zeus (1.19.7–8, adducing *Timaeus* 41a7, *Phaedrus* 246e, *Timaeus* 40e). Platonists, according to Hippolytus, hold three conflicting opinions as to the soul: that it is naturally immortal, that it is naturally mortal but immortal by divine fiat, and that it is composite and therefore doomed to perish (1.19.10). We do not know of any Platonist who would have endorsed the third position; nor is it clear that the school was divided, as he affirms, between those who taught that souls migrate after death from body to body and those who held that some populate the retinue of the gods while others suffer eternal torment (1.19.12–13). Most Platonists embraced both myths, since both are represented in Plato's dialogues; they were not so likely, however, to hold the Peripatetic doctrine of the mean which Hippolytus now proceeds to expound (1.19.14). His enumeration of the four cardinal virtues is indeed consonant with the teaching of the dialogues and the handbooks (Alcinous, *Isagoge* 30.4), but the lapidary antitheses between each virtue and the answering vice which he appends to the list (1.19.16b) find parallels only in Aristotle's treatises on ethics. His demonstration that Plato thinks vice involuntary because it proceeds from ignorance rests on a passage which purports to be from the *Republic* but is in fact from the *Clitophon* (407d at *Refutation* 1.19.21–22). The last tenet to be attributed to Plato is one that he certainly held—that the aim of punishment ought to be the reform of the sinner, not the mere expiation of the sin (1.19.22–23).

Pythagoras and Plato are treated almost as one in Hippolytus' etiology of the Valentinian school (*Refutation* 6.21–22). Having rehearsed again the doctrine that all things

issue from number by way of points and lines (6.23.1–4), he goes on to expound the Pythagorean distinction between the noetic and the physical universe (6.24.1–2). The former is the source of the reasoning faculty, by which we discern the nature of things intellectual, incorporeal and divine (6.24.3); the lower cosmos is a theatre of conflicting forces, whose permutations under the play of love and strife are described in the poetry of Empedocles (6.25.1–4). Hippolytus discovers here a template for the theogony of Ptolemaeus, the pupil of Valentinus, which recounted the procession of a series of pairs of syzygies of supernal beings from the ineffable monad. To account for the riddling character of this myth, he explains that Pythagoras bequeathed his moral precepts to the school in the form of ciphers, in which the adept will perceive an abstruse and figurative sense, obscure to those for whom bodily organs are the sole conduits of knowledge (6.26.1). This would pass for Platonism only with those who believed that unwritten doctrines borrowed from Pythagoras were at the kernel of Plato's thought.

Hippolytus says little of Aristotle in his first book except that he stipulates ten categories, or modes of predication (1.20.1–2), and that in most respects he agreed with his master Plato, though not in his denial of immortality to the soul, his postulation of a fifth element and his judgment that external goods are necessary to happiness (1.20.4–5). In the seventh book he presents a facetious synopsis of the Stagirite's doctrines to prove that Basilides, the preacher of a non-existent god, was his disciple. Aristotle is (justly) said to define a being (*ousia*) in its proper sense as that which subsists by itself and does not require a substrate (7.18.3). Hippolytus or his source goes on to argue that, as common nouns and names of properties do not designate anything in themselves, but only when applied to some material particular, all beings are in fact composed of non-existent elements, from which it follows that being in itself has no existence (7.18.5–6). Aristotle's cosmology is now paraphrased in some detail. Hippolytus follows precedent in attributing to him a treatise *On the World* which contrasts the serenity of the heavens above the moon with the vicissitude of sublunary affairs (7.19.1–3); he may be an independent witness, together with Alexander of Aphrodisias, to the existence of an Aristotelian treatise on the fifth element, forming a triptych with the *Physics* and *Metaphysics* (*Refutation* 7.18.4; cf. Alexander, *On Metaphysics* p. 592.10 Hayduck). Of Aristotle's teaching on the soul he declares, satirically adapting Plato's dictum on the inscrutability of the creator, that it is easy to reproduce the definition, but hard to ascertain what it signifies (7.19.5–6; cf. *Timaeus* 28c). As to God, he continues, it is hard to say how Aristotle defines him, and impossible to make sense of the information (7.19.7). After perusing Aristotle's fatuities, says Hippolytus, Basilides imagined that he could glorify God by proclaiming that he is not (7.19.9). This is shrill enough for Hippolytus, but too shrewd, and it is probable that some belligerent Platonist—perhaps his older contemporary Atticus—has furnished this arsenal of persiflage (Mansfeld 1992: 324).

The Stoics are treated as one school by Hippolytus, who attributes to Zeno the tenet that the foundation of all is God, that this God is a body of extreme purity, that he permeates the world as *pronoia* or providence, and that all is subject to fate, which is onerous only to those who do not comply voluntarily with its mandates (*Refutation* 1.21.1–2). He adds that, while they think the soul a body like everything else, they also hold it to be immortal, and believe in its transmigration after death (1.21.3). In contrast to this last assertion, which only Epiphanius corroborates (*Panarion* 1.7.2), Hippolytus could be relying on almost any source when he goes on to say the Stoics maintained a succession of worlds, each born from the cremation of the last (1.21.4).

Against the Epicureans one can only expect quotidian polemic. According to Hippolytus, they dissent from all other schools, pronouncing atoms and void the *archai* of all—not only the world and all its denizens but God himself (*Refutation* 1.22.1–2), whom they none the less think eternal (1.22.3). Treating them throughout as though they were monotheists, he complains that they deny both fate and providence, locating God in a sphere outside the world (1.22.3), and entertaining no fear of punishment after death since they contend that the soul undergoes the same dissolution as the body (1.22.5). The last "heresy" (as Hippolytus styles it, adopting the pagan word for "choice" with a Christian inflexion) is that of the Academics, personified in Pyrrho (1.23.1). Since he urges suspension of belief, maintaining that every philosophical opinion should be tentative rather than assertoric, Pyrrho is the one thinker among the Greeks who does not assign to the world an *archē* of any kind (1.23.3).

Tertullian of Carthage (c. 160–c. 220)

The sulphurous Tertullian, who never portrays an adversary in more than two dimensions, is equally guilty of caricaturing himself when he exclaims, in a tract against heresies, "What has Athens to do with Jerusalem?" (*Proscription of Heretics* 7),as though there could me no marriage between the gospel and philosophy. We traduce him again when we father on him the aphorism *credo quia absurdum*—"I believe because it is absurd"—which would imply a leap of faith in the teeth of reason. The true form of the saying—*certum est, quia impossibile*, "it is certain because impossible" (*On the Flesh of Christ* 5)—is the peroration to a deductive argument from the omnipotence of God. If God can do all things he, and he alone can do the impossible; for him it is therefore a natural prerogative to perform works that our nature forbids us to imitate; if, then, we hear of God performing some paradoxical action like the resurrection of Jesus, it should tax our credence less than a report of his having performed some workaday action. This is not, as some have proposed, a variant of the Aristotelian maxim that the improbable is less likely to be invented than the probable in forensic situations; nor will a close perusal of his writings on the Trinity suggest that in his lexicon "person" and "substance" correspond to first and second *ousia* in the *Organon*.

Yet when the question is one of physics rather than theology, Tertullian does not believe that Jerusalem should despise the wares of Athens. In *On the Soul*, he undertakes to demonstrate the reality of the soul, which implies for him that it is a body. The visions of female prophets afford good evidence of this (*On the Soul* 9.4), and the Platonic theory, which states that an incorporeal soul migrates from body to body under a penal law which it cannot decipher, is manifestly illogical (24; 28–32); the argument is driven home, however, by appeals to all three founders of the school. Zeno was the first to declare that soul is spirit (5.3); Cleanthes had urged that children resemble their parents in both visible and invisible traits (5.4); Chrysippus dispelled all controversy by pointing out that if the soul quits the body in death it must be attached to it in life and only bodies can be contiguous to bodies (5.6). These arguments are reinforced by the observations of medical writers—Soranus, Asclepiades, Herophilus—all of whom subscribed to the presuppositions of the Stoics; Zeno's notion of spirit as a fine element is carefully distinguished from the doctrine that the soul is air, which Tertullian ascribes to Anaximenes and Heraclides Ponticus (9.5). Tertullian remarks that Seneca, the most popular expositor of Stoic teachings to the Latin world, is "often on our side" (20.1). Simply to call him a Stoic, however, would be to ignore his motives and biblical

foundations of his philosophy: his rejection of a material soul (11.1) reveals that he and the Stoics were not wholly at one in their definitions of the term *corpus* (body), and in his proem he undertakes to refute not only Plato but the Simonians, the dualistic Hermogenes and the Menandrians who denied the resurrection of the body. The Stoics denied this also, and it is evident that in this work, as in others, no philosopher is credited with the possession of the whole truth, and no error is deemed to require correction unless it encourages the growth of impious and fissiparous teachings within the Church.

Origen of Alexandria (c. 185–c.254)

Origen is commonly regarded as the philosopher among early Christian writers, and his panegyrist Gregory Thaumaturgus testifies that he required his pupils to master the teachings of the principal schools. In his letter to Gregory, however, he accords supreme authority to the scriptures and concedes to philosophy only an auxiliary role in the work of exegesis. Philosophy can elucidate what the scriptures say obscurely or elliptically, but if, for instance, philosophy offers us two definitions of the word *ousia*, it is by appeal to the scriptures alone that a Christian makes his choice (*On Prayer* 27.9). The martyr will exemplify the same four cardinal virtues which are recognized by Greek moralists (*Exhortation to Martyrdom* 6), but the voluntary death which Origen commends would not have seemed virtuous to most Greeks. Plato is sometimes a friend but never a master: his doctrine of the incorporeal soul is to be preferred to the tenets of other schools, since these exclude the providential award of goods and penalties after death, and the apostles do not forbid us to imagine an ascent of the soul to God through the planetary spheres. If, however, Origen taught that the soul has fallen into its present body from a state of incorporeal beatitude (and this is by no means certain), it was not because, like Plato, he believed that it is naturally immortal, but because he could find no other way to reconcile the unequal lot of human beings at birth with the justice of God. It is not his custom, in works addressed to Christians, to examine the utterances of named philosophers. Quotations abound in his refutation of Celsus, a pagan critic of Christianity, but in many cases these are mere iterations of a passage that he is refuting. Original citations in this work are often accompanied by the rider that the Church has spoken better where the Greeks have spoken well.

References to the Presocratics—Heraclitus, Empedocles, Parmenides and Pherecydes—are anticipated in the invectives of Celsus; Origen, by preserving this, adds one fragment of Pherecydes to our meager remains, but not from a bank of independent knowledge (*Against Celsus* 6.42). He can also, without the prompting of Celsus, demonstrate from Chrysippus that the goal of philosophy is to restrain the passions (1.64; cf. 8.51). He prefaces this lesson with an allusion to the repentance of the libertine Polemo, adding, however, that for every convert to Platonism the Gospel saves a multitude. Chrysippus' interpretation of a scabrous picture of Zeus and Hera is cited to show that Christians were not the only patrons of allegory (4.48; cf. Diogenes Laërtius 7.1.138). Against the charge that Christians are unfilial Jews, he retorts that on the same principle Chrysippus and Aristotle were not philosophers but renegade disciples (2.12). He may have in mind the satire on the defection of the Academy by Numenius, from whom he has excerpted passages unattested even in Christian sources (5.57; 1.15). We must add the caveat that, while we learn from other witnesses that Numenius handled a variant of the story of Moses' contest with the sorcerers, there is no attestation

elsewhere to a book entitled *Epops* (Hoopoe) in which Jesus was presented under an allegorical guise (4.51).

Celsus, if not strictly a disciple of Plato, holds him in higher esteem than other thinkers. Origen's attempts to unmask him as an Epicurean are inspired not so much by tokens of allegiance to Epicurus in his work as by the apologist's desire to render him odious to other Greeks (1.8, 2.60 etc.; cf. 3.75). Even when he is not quoting from the dialogues, his prose is honeycombed by Platonic idioms and paraphrases that are half quotations. In answering Celsus, Origen repays both quotations and conceits with interest. He can give evidence of his own familiarity with Plato—for example, by contrasting his analysis of the virtues with those of the Stoics and Epicureans. More frequently, however, he sets out to show that a passage commended by his adversary is inferior to or dependent on the revealed truth of the scriptures. Thus Plato's asseveration in the *Laws* that wealth cannot coexist with virtue is "not unpersuasive", but it is neither a match nor a source for the saying of Jesus that it is as easy for a camel to pass through the eye of a needle as for a rich man to enter the kingdom of heaven (6.15, citing *Laws* 716a, Matthew 19.24). Again, it is impossible that the prophets of God received their first intelligence of a heaven above the heavens from the *Phaedrus*, but it is eminently probable that Plato discovered this notion in some Greek version of the Hebrew scriptures (6.19, citing *Phaedrus* 247c, Psalm 148.4–5). Platonists forbid Christians to use allegory as a palliative to superficial blemishes in their own scriptures, but even in its literal sense the story of Lot's involuntary sexual congress with his daughters is not so obscene as Plato's account of the birth of Love (4.45, citing Genesis 19.26; 4.39, citing *Symposium* 203 b–e). The narrative of the fall is another mystery, more profound than Plato's fancy of the soul's descent to earth after shedding her wings (6.43; cf. *Phaedrus* 246b–c). Plato approached the truth when he declared that is difficult to find out the Father of all, but he ought to have seen that it is not so much difficult as impossible without a gratuitous revelation (7.42, citing *Timaeus* 28c). When Origen censures the Platonists for supposing that they can arrive at knowledge of God through negation, synthesis and analogy (7.42), he shows that he is conversant with the practices enjoined by his older contemporary Alcinous in the *Handbook of Platonism*; he admonishes Celsus, however, that none of these disciplines is a substitute for divine communication, and in the proem to his *Commentary on the Song of Songs* he concludes that it was Solomon, long before the Greeks, who hit upon the division of philosophy into three branches. In fact we know of no Greek precedent for his taxonomy, in which the contemplation of revealed mysteries, under the name of epoptics, enoptics or theorics, takes the place of logic alongside physics and ethics; since, however, he knows that logic is one of the recognized sciences, it would seem that he is adapting the received pattern to fit the threefold Hebrew canon of Solomon's works.

Eusebius of Caesarea (c. 260–339)

Eusebius' *Preparation for the Gospel* is the longest and most erudite of surviving attempts to demonstrate that the gospel is prefigured or substantiated by the best thought of the Greeks. The majority of his witnesses are philosophers, and our knowledge of one philosopher, only thirty years his senior, has been immeasurably enriched by this compendium, since his leading aim was to demonstrate the vacuity of Porphyry's complaints against the Christians and the inconsistency of his own beliefs. The three books of the *Philosophy from Oracles* furnish him with a mine of extracts—precious to us, since they

would otherwise be lost—which are supposed to reveal that Porphyry advocated the worship of demons, that he slandered Christ, and that in the teeth of his sedulous opposition to animal sacrifice elsewhere, he was prepared to spill the blood of a beast when an oracle prescribed this (*Preparation* 4.7 and often thereafter). Although a distinction between the theological and the physical interpretation of myth is briefly canvassed, Eusebius assumes that a literal reading of the *Philosophy from Oracles* will be as true as it is patently sacrilegious. Porphyry's treatise *On Abstinence* is cited as evidence that he was in two minds on the question of animal sacrifice (4.16); the *Letter to Anebo*, another work that we should otherwise be obliged to reconstruct from pagan sources, is presented as a recantation, in which he exposed the imposture and futility of cults that he had once described with unbecoming reverence (5.7). Porphyry's own quotations from the *Phoenician History* of Philo of Byblos (1.9–10) are adopted by Eusebius as solvents to the allegorical varnish which has hitherto obscured the depravity of pagan myths. Eusebius does not rely so heavily as early Christian writers on the argument that the pagans stole form Homer but, since Porphyry has accused the Church of plagiarism, he thinks it a fair retort to transcribe a long passage from a work *On Plagiarism* in which Porphyry had enumerated the thefts of previous writers (10.3). Because we can seldom test his excerpts against a surviving work, we cannot say how fairly Eusebius has represented his enemy, but we may reasonably suspect that Porphyry's reasoning was often more dialectical, and more astutely tempered to the capacities of different audiences than is evident now from this schematic and hostile filleting of his words.

We owe to this Christian aspic almost all the surviving utterances of Numenius of Apamea, who was remembered by the Neoplatonists as Porphyry's mentor, though Eusebius summons him, against his admirer, as a witness to the trinitarian character of the Godhead. The dialogue *On the Good* and a jeremiad *On the Defection of the Academy* are his sources. The second (*Preparation* 14.5–8) adds more to the history of polemic than to our understanding of the ancient Skeptics. In the excerpts from *On the Good*, by contrast, we find unparalleled remnants of a dialogue on the remoteness of the first principle (11.21 = Fr. 2 Des Places), fusion of georgic and demiurgic images in the account of the birth of souls (11.18 = Fr. 13), and a theological variation on the theory of Forms in which the form of the Good is personified as the first God, or first mind, by contemplation of which the archetypes of the physical world arise in the second God (11.22 = Fr. 16; 11.17 = Fr. 11). A schism in this contemplative mind and the immersion of the lower half in matter are described in terms that other Platonists thought unduly "tragic" (11.22 = Fr. 16; cf. Fr 21). Eusebius, for his part, is content if he can enlist a philosopher's suffrage for the doctrine of three hypostases in one Godhead; the same myopia predisposes him to ignore the teachings of Numenius on the soul and his intertwining of the *Odyssey* with the myth of Er, which predominate in pagan testimonia.

Quotations from Numenius (*Preparation* 14.4 = Fr. 24) and his contemporary Atticus (11.2 = Fr. 1 Des Places) reveal the source of Clement's jibe that the Greeks have torn truth limb from limb like Pentheus in the *Bacchae* (*Stromateis* 1.13.57). Another excerpt from Atticus, which holds up the doctrine of separable forms as a spur to endeavor and a diagnostic of genuine Platonism, follows hard on one in which Porphyry undertakes to dispel apparent contradictions in Plato's theory of the soul. Eusebius also quotes with approval a laudatory, if tendentious, exposition of the prologue to the Fourth Gospel by Amelius, a colleague of Porphyry and pupil of Plotinus (11.19). The Presocratics he seems to know only through the paraphrases of the doxographers, and we can never turn to him for a precise quotation which is not anticipated in other sources. He is

equally blind to the levity of the Cynic Oenomaus, whose indefatigable salvoes against Apollo pass from oracle to oracle, deducing from the equivocal forecast that nothing was truly foreknown, and gathering further affidavits from the tragedians to the duplicity and malevolence of the god or of those who speak for him. This is the play of a man who resolutely thumbs his nose at the things that others hold in reverence; to Eusebius Oenomaus is half a skeptic and half a pure theist, indignantly defending the gods against the impostures of their acolytes.

Aftermath

In the fourth century legislation by Christian Emperors opened both formal schooling and secular offices to members of the Church. Since ecclesiastical preferment often bestowed political influence, one could seldom rise to a major bishopric without showing evidence of a refined education, the commonest measure of which, then as before, was one's capacity to imitate or evoke the literature of the classical epoch. The writings of the Cappadocian Fathers and John Chrysostom are permeated by echoes and reminiscence—though not so frequently by direct quotations—of Plato, Aristotle and other eminent thinkers of the past. Their works are not a rich quarry for historians of philosophy, since rhetorical conventions favored the timely adaptation of familiar precedents rather than displays of recondite learning. By contrast, the grammarian Marius Victorinus, taking up his pen against the heretical "Arians" after a late conversion, makes liberal use of Platonic and Aristotelian tenets, some of them now obscure (Hadot 1968). Representing God the Father as a potentiality which becomes actual in the Holy Spirit and active in the Son (thus realizing the first and second entelechies of Aristotle), Victorinus aligns each person of the Trinity with a member of the intelligible triad which had been elicited from Platonic sources either by Christian Gnostics or by the early successors of Plotinus. The Father corresponds to Being, the object of knowledge, the Son to the mind which apprehends it, the Spirit to the Life that unites them. Neoplatonic writings furnish only meager and conflicting testimonies to the operation of this triad, and Victorinus is one of the chief authorities to whom scholars have appealed in their attempts to reconstruct it. The project is not indefensible, but we must not pretend to be able to ascertain how much deformation this Platonic matter may have incurred in the service of a new creed.

More valuable to historians is the treatise *On the Nature of Man*, by Nemesius of Emesa, which was written to prove, against two notorious heretics, that Christ, though God, was identical with the man Jesus and possessed not merely a human body but a human soul. In canvassing the nature of the soul and its relation to the body, Nemesius mentions or quotes some sixteen works by Galen, fourteen from the Platonic corpus and eight by Aristotle, including the lost Eudemus. He adds something to our knowledge of Epicurus; he would have added more to our knowledge of the Stoics had he named his authorities. He does not name Posidonius, though he may have drawn upon him; if he cites Dicaearchus he confuses him with Deinarchus (*On the Nature of Man* 2.17; Sharples and Van der Eijk 2008: 53 nn. 262–3). Consequently we cannot be sure that he had a first-hand acquaintance with any doctrine of "Ammonius, the teacher of Plotinus" (2.17; 3.39), who is said elsewhere to have left no written remains. Most probably he is relying on the *Miscellaneous Questions* of Porphyry, cited once by name in his work (3.43) together with some morsels of other lost writings (Sharples and Van der Eijk 2008: 54, 80). Nemesius is rather a compiler than a philosopher, and hence les prone

to modify what he has read; yet even he is capable of hermetically Christian reasoning, as when he argues for the existence of all souls from the beginning of the world, not on Plato's grounds, but on the grounds that otherwise God would be forced to bring a new soul into being with every conception, and it would follow that the initial creation had been incomplete.

Augustine became a Platonist when he ceased to be a Manichee, and it was only after years of deliberation that he came to regard the doctrines of the primacy of scripture, the incarnation of the Word, the resurrection of the body and the temporal creation of the soul as insuperable obstacles to the reconciliation of pagan philosophy with the Gospel. At *City of God* 8.12–24, he denies that commerce between humanity and the gods could be maintained by daemons, "as Apuleius opines"; at 12.13–17 he makes light of the common argument that if there is a beginning to the existence of any material thing, it must also have an end. For all that, even his ripest thoughts are underwritten by premises that may justly be called Platonic. He continued to maintain the Platonic equation of being and value, with its corollary that evil is no substance but a deficiency of being; in his epistemology he appears to subscribe to Porphyry's account of the role of *phantasia* in the comparison of particulars with their mental archetypes (*Genesis Literally Interpreted* 7.12.16); in his theory of the fall the position of Adam is analogous to that of the Platonic soul in the supercelestial heaven. In Porphyry's (otherwise unattested) work *On the Regression of the Soul*, he discovers a Neoplatonic correlative to the Trinity. Porphyry had distinguished a paternal mind, in which Augustine recognized God the Father, from a filial mind (*City of God* 10.23), and had posited a third entity which Augustine identifies with the Holy Spirit. At the same time he insists that the purifications enjoined by Porphyry were not designed to liberate the higher soul (10.27), and that Porphyry himself confessed that he knew no universal way of uniting that which is best in us to God.

Much of Augustine's early dialogue Against the Academics could be read as a Platonic confutation of skepticism. His argument that one cannot profess to know what resembles truth, as the Skeptics do, without admitting to some apprehension of truth itself may be original, but would not be unserviceable to a pagan disputant. His genealogy of skepticisms does not quite concur with its predecessors in Cicero and Numenius, and we do not know where he learned that Zeno the Stoic studied under Polemo, and that Arcesilaus his fellow-disciple, adopted skepticism as a mask when Zeno began to preach a new system (*Against the Academics* 3.17.38; Brittain 2001: 272–276). At the same time, we must make the familiar point that he is a Christian even when he is a philosopher, and that, in addition to the mere tautologies and analytical truths that were universally agreed to be items of knowledge, he insinuates that there are truths of equal certitude, sustained by no criterion, or axiomatic principle that would be recognized in any pagan school.

Scurrilous and eristic accounts of pagan thought continued to be offered to Christian readers of this epoch. The *Panarion*, a digest of eighty heresies completed in 376 by Epiphanius of Salamis, is prefaced by surveys of the chief Greek heresies, in which there is nothing that will surprise a scholar, except his fathering of an Orphic cosmogony on the Epicureans (*Panarion* 1.8). *The Cure for all Distempers* by Theodoret of Cyrrhus is notable for its distribution of therapeutic counsels under twelve heads, including "On Principles", "On Matter and the Cosmos", "On Human Nature", "On Angels" and "On Sacrifices". When he quotes philosophers, however, he is almost always stealing the grain that others have threshed, and only those who are willing to believe (for exam-

ple) that Origen was the teacher of Plotinus will approach him in expectation of a new harvest. It was not such books that sustained the vitality of Christian thought in the millennium that followed the collapse of the western Empire, but a perpetual return to ancient springs. It was because Boethius and John Philoponus took their place beside, and even surpassed, the pagan commentators on Aristotle in the sixth century that Europe could boast an Aquinas in the thirteenth. It is also true, however, that the fecundity of Christian thought would have been severely impaired if it had not been able at all times to cherish the pagan while condemning his paganism.

References and further reading

Primary sources

Augustine, *Contra Academicos*, ed. W. M. Green and K. D. Daur, Turnhout: Brepols 1970.
Augustine, *De Civitate Dei*, ed. B. Dombart and A. Kalb, 2 vols, Turnhout: Brepols 1955.
Barnabas, in A. Harnack et al., *Patrum Apostolicorum Opera*, Berlin: Teubner 1906.
Clement of Alexandria, *Stromata*, ed. O. Stählin, L. Früchtel, and U. Treu, Berlin: Akademie-Verlag, 2 vols: Books I–VI, 4th edn. 1985; Books VII–VIII, 2nd edn. 1970.
Epiphanius, *Panarion*, 3 vols, ed. K. Holl, Berlin: De Gruyter 1915.
Eusebius, *Praeparatio Evangelica*, ed. K. Mras, 2 vols, Berlin: De Gruyter 1954 and 1956.
Hippolytus, *Refutatio Omnium Haeresium*, ed. M. Marcovich, Berlin: De Gruyter 1986.
Irenaeus, *Contre les Hérésies*, vol. 2 ed. A. Rousseau and L. Doutreleau, Paris: Cerf 1982.
Justin, *Apologies*, ed. D. Minns and P. Parvis, Oxford: OUP 2009.
Justin, *Dialogus cum Tryphone*, ed. H. C. Brennecke and E. Mühlenberg, Berlin: De Gruyter 2005.
Minucius Felix, *Octavius*, ed. J. Beaujeu, Paris: Belles Lettres 1964.
Nemesius, *De Opifico Hominis*, ed. M. Morani, Leipzig: Tuebner 1987.
Origen, *De Principiis*, ed. P. Koetschau, Berlin: De Gruyter 1913.
Origen, *Exhortatio ad Martyirum, Gegen Celsus, Die Schrift vom Gebet*, ed. P. Koetschau, 2 cols, Berlin: De Gruyter 1899.
Tatian, *Oration to the Greeks*, ed. M. Whittaker, Oxford: OUP 1982.
Tertullian, *Opera*, ed. A. Gerlo, 2 vols., Turnhout: Brepols 1950, 1954.
Theodoret, *Affectionum Graecarum Curatio*, ed. J. Raeder, Leipzig: Teubner 1904.

References

Brittain, C. (2001) *Philo of Larissa*, Oxford: Oxford University Press.
Clark, E. (1977) *Clement's Use of Aristotle*, New York: Mellon.
Daniélou, J. (1973) *Gospel Message and Hellenistic Culture*, London: SCM.
Edwards, M. J. (1991) "Xenophanes Christianus?", *Greek, Roman, and Byzantine Studies* 32: 219–228.
Hadot, P. (1968) *Porphyre et Victorinus*, 2 vols., Paris: Études Augustiniennes.
Hershbell, J. (1973) "Hippolytus' *Elenchos* as a Source for Empedocles Re-examined", *Phronesis* 18: 97–114 and 187–203.
Mansfeld, J. (1992) *Heresiography in Context*, Leiden: Brill.
Osborne, C. (1987) *Rethinking Early Greek Philosophy*, Ithaca, NY: Cornell University Press.
Runia, D. (1989) "Festugière Revisited: Aristotle in the Greek Patres", *Vigiliae Christianae* 43: 1–34.
Sharples, R. and P. Van der Eijk (2008) *Nemesius of Emesa, On the Nature of Man*, Liverpool: Liverpool University Press.
Van Winden, J.M.C. (1971) *An Early Christian Philosopher*, Leiden: Brill.

47
THE ARABIC RECEPTION OF GREEK PHILOSOPHY

Peter Adamson

To tell the whole story of how Greek philosophy was received in Arabic would be to tell the story of Arabic philosophy itself. The word for philosophy in Arabic was *falsafa*, and it's significant that this is a loan-word from Greek. It points to the fact that the Arabic philosophical tradition took its initial inspiration from Greek sources, in particular the many works of Greek science, mathematics and philosophy that were translated into Arabic in the eighth to tenth centuries AD, the second to fourth centuries of the Islamic calendar (see Gutas 1998, Endress 1987/1992, and the valuable table by Gutas in Pasnau 2010: vol.2, 802–14). This is not to say that philosophers who wrote in Arabic were slavish followers of the Greeks. The Islamic world produced self-consciously original philosophers who deliberately reworked, selected and departed from Greek ideas. Foremost among these innovators was Avicenna, whose new system formed the basis for much subsequent medieval philosophy, among Jews and Christians as much as Muslims. It has even been proposed that we should see Avicenna's career (he died in 1037 AD) as marking the real end of the philosophy of late antiquity (Wisnovsky 2003: 266).

Yet we can find considerable originality even among philosophers who sought to be faithful followers of Aristotle and the other Greeks. As in ancient Neoplatonism, originality was sometimes unavoidable, a result of attempts to fill gaps in Aristotle's thought, to reconcile Aristotle with Platonism, and to extend ideas for use in new contexts. This is the sort of originality we often find in thinkers who wrote in Arabic prior to Avicenna, such as al-Kindī (d. c. 970), the first champion of *falsafa* in the Islamic world, and the Aristotelian thinkers in tenth century Baghdad who carried on the Alexandrian tradition of commentary on Aristotle. These same authors were not averse to deploying Greek philosophical ideas in support of religious doctrines. We find one of the main representatives of the school, the Christian Yaḥyā Ibn 'Adī (d. 974), writing apologetic treatises on the Trinity (Platti 1983). These might plausibly be compared to the much earlier Trinitarian treatises of Boethius in the Latin tradition. The Baghdad Aristotelians also counted among their number the more famous al-Fārābī (d. 950), a Muslim thinker who both wrote commentaries on Aristotle and produced more systematic and independent treatises that prepare the way for Avicenna. Among the "philhellenic" thinkers we must not forget Averroes (d. 1198), the greatest medieval commentator on Aristotle—one of a handful of "conservatives" in the twelfth century who wanted to return to the Greek sources rather than to follow or revise the new synthesis of Avicenna.

I do not propose to attempt here a survey of all these reactions to Greek ideas—which can in any case be sought elsewhere (for example, Adamson and Taylor 2005). Instead, I will concentrate on the question of how Greek philosophers were received and perceived in the medieval Arabic tradition. That tradition did not portray the Greeks quite as we see them today. To mention a few particularly striking examples, the medieval Arabic tradition foisted Neoplatonic ideas onto Presocratics; conflated Socrates with Diogenes the Cynic; relied on summaries of Platonic works deprived of their dialogue form; and labeled the *Enneads* of Plotinus as a work by Aristotle. Where we find general accounts of Greek philosophy as a whole, these are invariably inaccurate, and occasionally border on mythic fantasy. But this is not to say that the view from, say, tenth century Baghdad was a wholly distorted one. A philosopher like al-Fārābī would in fact have had access to a wide range of excellent translations from Greek, including versions of most of the Aristotelian works we have today. Even in these more favorable cases, though, subtle differences and shifts were introduced as a result of translation and the vicissitudes of textual transmission.

The Presocratics as the founders of Greek philosophy

In the case of the Presocratics there was precious little accurate information available to medieval readers of Arabic, far less even than the scraps we can piece together now. Certainly there was no access to complete works of Presocratic philosophy. Like us, they depended entirely on subsequent reports. The richest single text to enter the Arabic tradition was the *Placita Philosophorum* ascribed to Plutarch—a summary of the account of Aëtius, which was in turn based on Theophrastus (Daiber 1980, cf. Gutas 1982a). But many other sources we have at our disposal were lacking—not only from the Aristotelian tradition (such as the invaluable *Physics* commentary of Simplicius), but also Christian theological writings and, as we will see, the bulk of the Platonic corpus. Often, readers had recourse to other summaries where fiction prevailed over fact.

The most important such work was the *Opinions of the Philosophers* ascribed to "Ammonius" (Rudolph 1989). The ascription may indicate an ultimate provenance in the Neoplatonic school of Ammonius at Alexandria, and certainly the text does draw on Greek sources. It is heavily influenced by the Neoplatonic tradition, and has also been shown by Rudolph to draw on a Christian heresiography (that of Hippolytus, d. 235–6 AD). To give a flavor of the text, here is the beginning of Pseudo-Ammonius' entry on Thales:

> Thales said: what may be stated irrefutably is that there was the Creator, with nothing created. He [then] created that which He created, while having no form in [His] essence. For before the creation, there was only He, and all attributes consisted in [saying] "He is He (*huwa huwa*)."
>
> (Rudolph 1989: §II.1–3)

Here Thales becomes a mouthpiece for a monotheistic theory which looks suspiciously congenial to Islam, emphasizing the unity and unique sovereignty of God. At the same time, there are echoes of Neoplatonism. When "Thales" remarks that one can say of God only that "He is He," this is as apt to put us in mind of Plotinus (*Enn.* V.3.10: the One could only say "I am, I am" or "I, I") as *Exodus* 3.14 ("I am who am").

We should not, however, leap to conclude that the Thales of Pseudo-Ammonius bears no relation whatsoever to the Milesian philosopher. For one thing, the doxography of Thales takes pride of place at the beginning of the *Opinions*, which presumably reflects the fact that Thales was the first of the Pre-Socratics. Furthermore, later, Thales is said to have held that the first created thing, the material principle which underlies all form, is water (Rudolph 1989: §XIII.1–2). Even as a Neoplatonizing theology is anachronistically foisted upon Thales, some accurate information is retained. This had predictable results for later authors who tried to set down the history of Greek philosophy while using sources like the Pseudo-Ammonius. A good example is al-Shahrastānī (d. 1153 AD), author of the monumental *Religions and Sects* (*al-Milal wa-l-niḥal*). In this work he surveys not only various Muslim theological factions (Kazi and Flynn 1984) but also the teachings of other cultures, including the Greeks (Gimaret and Monnot 1986). Pseudo-Ammonius is one of his main sources, and he repeats both the creationism of this "Thales" and the doctrine of the primacy of water.

Both Pseudo-Ammonius and al-Shahrastānī classify seven philosophers as the "pillars" of ancient Greek wisdom. Like the "seven sages" of antiquity (for example, at Plato *Protagoras* 343a), this list begins with Thales, but the remaining six are different: Anaxagoras, Anaximines, Empedocles, Pythagoras, Socrates and Plato. Notice the rather surprising chronology implied here. The mis-ordering of the sages in al-Shahrastānī relates to a tradition in which Empedocles is made a founding father of all Greek philosophy—and even the teacher of Pythagoras (see De Smet 1998). An earlier writer who likewise gives preeminence to Empedocles is the tenth century Neoplatonist al-'Āmirī, author of several philosophical works including a *Book on the Afterlife* (*Kitāb al-Amad 'alā l-abad*, written in 985–6 AD). In this treatise, al-'Āmirī reports (Rowson 1988: §III.1) that Empedocles learned *ḥikma* (philosophy or wisdom) from a legendary sage called Luqmān, who is mentioned in the Koran (31:12–13) as having cautioned against putting other beings on a par with God. Perhaps al-'Āmirī imagines that Luqmān is the source of the teaching of Empedocles described a bit later in the text. He tells us that for Empedocles, God exercises knowledge, power, will and goodness, but without possessing distinct attributes which would correspond to these names (Rowson 1988: §IV.1). Again, a Presocratic philosopher becomes the mouthpiece for ideas that resonate strongly with contemporary theological concerns (see further Rowson 1988: 224–32; cf. De Smet 1998: 62–85).

What I have said so far has perhaps given the impression that authors of the Muslim world perpetrated a rather scandalous appropriation and distortion of the Presocratics. But there are are couple of caveats to bear in mind. Firstly, insofar as the Presocratics were distorted, this sometimes occurred already in the sources that were translated into Arabic. For instance, there is enough overlap between the various presentations of the teachings of "Empedocles" to suggest that they share a single source, perhaps written in Greek and from a Christian Neoplatonic point of view (De Smet 1998: 36, 154). Of course further elements would have been introduced as this material was translated and re-worked by authors in Arabic. A second, more important caveat is the fact that a good deal of information about the Presocratics was available from the Arabic translations of Aristotle. Though they may have lacked Simplicius' commentary on the *Physics*, readers of Arabic had the *Physics* itself, as well as other rich sources like the first books of the *Metaphysics* and *De Anima*. Averroes and the members of the Baghdad school are thus able to show a decent knowledge of the Presocratics. A particularly fascinating example is the Baghdad school's commentary on the *Physics*. It contains a translation of

the *Physics* itself, extensive excerpts from Philoponus' commentary thereon, and further comments by members of the school (Badawī 1964–5; cf. Lettinck 1994). They not only repeat Aristotle's reports of Pre-Socratic views, but also imitate his rather lofty critical judgments of those views (see for instance on Anaxagoras, Giannakis 2008). This material inspired further discussion, as we can see from a question about Anaxagoras posed by a Jewish philosopher to Yaḥyā ibn 'Adī (see Pines 1954).

Socrates

So far, we have seen how Presocratic philosophers were known through doxographical histories, like the Pseudo-Plutarchian *Placita* and the *Opinions* of Pseudo-Ammonius, and through the works of Aristotle. They were also frequently mentioned in gnomological literature, sometimes called "wisdom literature." This genre is not unrelated to doxography, but characteristically given over to pithy and instructive anecdotes and sayings rather than summary accounts of philosophical views (see Gutas 1975, 1981, and 2000: §I, 4949–54). Gnomological literature was very popular in the Islamic world. For readers outside the rarefied atmosphere of a group like the Baghdad school, gnomologia would have been a crucial source for shaping perceptions of Greek philosophy. We can gauge the popularity of a gnomological work like the *Ṣiwān al-ḥikma* (*Depository of Wisdom*) from the numerous redactions and summaries made of the work. The original is lost, so it is thanks to these other versions that the text is known to us (see overview in Gutas 1982b).

A leading hero of gnomological literature was Socrates (see Alon 1991, 1995). Since Xenophon, it had been common to cast Socrates as a dispenser of unsolicited wisdom, often in the form of cutting insults. This scathingly witty Socrates was the one embraced by the Cynics, who saw themselves as his heirs both in their similar propensity to criticize anyone unfortunate enough to pass by, and in their voluntary poverty and simple lifestyle. The Cynical appropriation of Socrates reaches its apotheosis in the Arabic tradition, in which Greek anecdotes about Diogenes the Cynic reappear with Socrates cast as the lead character. Already in a collection of *Socratic Sayings* by al-Kindī, Socrates is shown living in a barrel and telling a great king to stop blocking off his sunlight (ed. Fakhry 1963, trans. Adamson and Pormann 2012). In one anecdote retailed by al-Kindī, but not known to us from any Greek source, Socrates proves his inviolable self-sufficiency when he is asked what he will do if the barrel where he lives should break. "Even if it breaks," he replies, "the place where it is will not break."

This Cynicized version of Socrates has been argued to stem from an earlier Christian tradition (Strohmaier 1974). Whatever the historical roots of the "Socrates of the barrel," the result was that in Arabic Socrates was usually seen as a hero of asceticism. Al-Kindī's Socrates is so relentless in his emphasis on virtue and wisdom that he denies any value at all to external goods, such as beauty or wealth. In fact, he holds that material goods are positively harmful, advising: "let your possessions be few, that your misfortunes may be few" (Fakhry 1963: §16). Of course it had been the common currency of several Hellenistic schools—especially the Stoics and Cynics—to reject the value of external goods, on the basis that virtue alone has true value. But Arabic Socrates seems closer to Cynicism than Stoicism, insofar as he seems to leave no room for a category of "preferred indifferents" (Adamson 2007a).

Yet there was not unanimous agreement as to the extent of Socrates' asceticism. A generation or so after al-Kindī, the great doctor and philosopher al-Rāzī (d.925) wrote a

short justification of his own life, called *The Philosophical Life* (ed. Kraus 1939: 99–111, trans. McGinnis and Reisman 2007: 36–44). In it al-Rāzī confronts unnamed critics who blame him for living too self-indulgently. Does he not claim Socrates as his model and leader (*imām*)? Indeed, says al-Rāzī, but accounts of Socrates' asceticism are greatly exaggerated. Socrates was an ascetic early in his life, out of excessive zeal for philosophy. But he eventually gave this up and changed to a lifestyle of moderation, which al-Rāzī considers much healthier. In arguing for this interpretation al-Rāzī displays some accurate knowledge of Socrates, mentioning for instance that he had a wife and children, fought in wars, and enjoyed entertainments and even wine (here I suspect an allusion to the *Symposium*; on the Arabic fortunes of that dialogue see Gutas 2000: §IV). This is a particularly sophisticated interpretation of a Greek philosophical authority. Al-Rāzī is determined to make common cause with Socrates, whose praiseworthiness is not in question despite his untoward youthful asceticism. Towards this end, al-Rāzī engages in a critical discussion of the historical evidence concerning Socrates, and even finds a way to explain the conflicting nature of this evidence: roughly, the young Socrates was the one we find in al-Kindī, the mature Socrates the one we would recognize from Plato's dialogues.

Plato and Galen

This raises the issue of whether and how al-Rāzī, or anyone else in this period, was able to read Plato. Like the Latin medieval tradition, the Arabic medieval tradition was far less acquainted with Plato than with Aristotle. Whereas Aristotle was extensively and accurately translated in full, the Platonic works were known only partially, and usually not in their original dialogue form. Greek summaries and paraphrases, translated into Arabic, were the primary route by which Plato came into the Islamic world. Franz Rosenthal, the great scholar of Graeco-Arabic studies, went so far as to remark that

> if we come across short citations of Plato [in Arabic], it is most likely that they have no connection with a real text of Plato's works, or with a paraphrase which closely follows the wording of the text, but with some interpretations or other works where the text of Plato is utilized.
>
> (Rosenthal 1940: 198)

This rule of thumb is still valid, even though Rosenthal himself and others have found texts with verbatim or near-verbatim quotation of Plato (Rosenthal 1940, Klein-Franke 1973, Arnzen 2009a). Such quotations, occasionally even preserving the dialogue form, have been found from dialogues like the *Phaedo*, *Laws* and *Republic* (for a recently unearthed example from the latter see Reisman 2004).

Still, the Islamic world knew Plato mostly through translations of late ancient texts based on Plato, rather than translations of Plato himself. Indeed there is no extant medieval Arabic version of any Platonic dialogue. Readers of Arabic were thus, as so often, at the mercy of late ancient transmitters. Among these, none was more important than Galen. The Galenic corpus was a central focus of the translation movement, and it included numerous paraphrase versions of Platonic dialogues. The great translator Ḥunayn ibn Isḥāq, whose circle produced some of the most accurate translations of Greek philosophical and scientific works, had a particular interest in Galen (he wrote about his own career as a translator of Galen: Bergsträsser 1925). Ḥunayn translated

Galen's partial paraphrase of the *Timaeus*, preserved today only in this Arabic version (Walzer and Kraus 1951). Galen's commentary on the *Timaeus* is also lost, except for fragments (Schröder 1934, Larrain 1992), but it was known to the Arabic tradition, in particular to the aforementioned al-Rāzī, who is a source for some of the fragments.

Perhaps because he was firstly a doctor and only secondarily a philosopher, al-Rāzī was unusual in defying the mainstream Aristotelian currents of Arabic philosophy and explicitly embracing Plato and Galen as his chief authorities. He anticipated the innovative and critical stance of Avicenna towards these two authorities, criticizing and modifying their teachings as he saw fit—a stance which may, ironically, have been taken over from Galen himself (cf. Menn 2003). One of al-Rāzī's works even bears the self-explanatory title *Doubts about Galen*. Yet he took Galen, and through Galen Plato, as his main inspirations in developing a philosophical system that departed widely from the Neoplatonizing Aristotelianism more typically found in the ninth to tenth century. For him five eternal principles—God, soul, matter, time and place—were required to produce the physical world we see around us. The *Timaeus* is lurking in the background here, as is a work of Galen's called *On Demonstration*—again, extant only in fragments, some of them Arabic. Galen's critique of Aristotle's theory of time in that work seems to lie behind al-Rāzī's radical theory of "absolute time," which is one of the five eternals (Adamson 2012b, 2013).

Although al-Rāzī's near contemporary al-Fārābī was closer to mainstream *falsafa*, and clearly took Aristotle as his primary inspiration, he also devoted considerable attention to Plato and his corpus. He wrote a pair of works entitled *Philosophy of Plato* and *Philosophy of Aristotle* (both trans. Mahdi 2001), which survey the works of both thinkers. The *Philosophy of Plato* (ed. Rosenthal and Walzer 1953) is apparently based on an ancient (perhaps even Middle Platonic) description of the Platonic corpus, and is notable for its rather fanciful etymologies for the names of each dialogue. The treatise must be used with caution as a measure of how well al-Fārābī knew Plato. Particularly striking is the fact that the *Laws* barely rates a mention in the *Philosophy of Plato*, even though we have an exposition (*talkhīṣ*) of this work by al-Fārābī. There has been some controversy as to whether he had access to a full version of the *Laws*, but it now seems clear that he knew it only in the form of a summary, likely that of Galen (Gutas 2000: §V, Harvey 2003).

Having said all this, the perception of Plato in the Islamic world was not defined solely by the appropriation of authentic Platonic works (or paraphrase versions thereof) by leading thinkers like al-Rāzī and al-Fārābī. Like the Arabic Socrates, the Arabic Plato had a long and distinguished career in wisdom literature, as a mouthpiece for ethical exhortation and a protagonist of edifying anecdotes (Hasse 2002, Arnzen 2009a). Though the influence of the real Plato lagged well behind that of Aristotle, especially as the tradition developed, enough renown attached to his name that an extensive corpus of Pseudo-Platonica emerged. Some of this material belongs to the alchemical tradition (Singer 1946). We also find texts combining pseudo-Platonic material with gnomologica and passages drawn from the genuine corpus, especially the *Timaeus* (Arnzen 2009b). This multi-faceted version of Plato had little impact on such figures as Avicenna and Averroes. But the twelfth century thinker Suhrawardī valorized Plato and claimed to be his follower when he founded the new and influential tradition of "Illuminationism," in self-conscious opposition to the Avicennized "Aristotelianism" which by that time had become mainstream philosophy in the Islamic world.

Aristotle

Now let us return to al-Fārābī and examine the companion piece of his *Philosophy of Plato*, the *Philosophy of Aristotle*. In this work al-Fārābī is at pains to present the Aristotelian corpus as methodologically well-ordered. He explains in considerable detail that Aristotle's works build upon each other, reflecting the order of subordinated sciences as intimated in Aristotle's own *Posterior Analytics* (especially I.7) and as set out in another work by al-Fārābī, the *Attainment of Happiness* (trans. Mahdi 2001). Al-Fārābī presupposes the Aristotelian distinction between that which is prior to us and that which is prior in itself. Within each science, we begin with what he calls the "principles of instruction"—that is, things that are already familiar—and work our way up to the foundations of the science in question, "the principles of existence." Lower or subordinated sciences provide the principles of instruction for higher sciences—for instance, physics provides the pedagogical starting points (but not of course the foundations) of metaphysics. This allows us to work our way from the most readily comprehensible sciences (according to al-Fārābī these are the mathematical sciences) to the sciences that are most primary in themselves. Of course the most primary science is "first philosophy," or metaphysics.

With this methodologically sophisticated account, al-Fārābī makes several advances on his predecessor al-Kindī, whose *On the Quantity of Aristotle's Books* is the earliest overview of the Aristotelian corpus in Arabic (Guidi and Walzer 1940, Adamson and Pormann 2012, cf. Jolivet 2004, Adamson 2007c). Although al-Kindī lays out a similar order of reading for the Aristotelian corpus, he is far less forthcoming about any underlying methodology—though he does argue for instance that it is important to study quantity and quality, as discussed in Aristotle's *Categories*, because our epistemic access to physical objects is solely by means of these (Guidi and Walzer 1940, §V.6). In fact the *Categories* looms large in al-Kindī's presentation of Aristotle. It is clearly one of the works with which he is most familiar, which is unsurprising given that Aristotle's logical corpus (the *Organon*) had been at the center of the Syriac philosophical tradition that forms the bridge between late Greek and early Arabic philosophy (see for example, Hugonnard-Roche 1987, Brock 1993, and for the role of Aristotle's logic in the canon Gutas 1999 and 2000: §IX). Al-Kindī shows less familiarity with other parts of the corpus, such as the ethical works. A comparison of the works of al-Kindī and al-Fārābī shows that in the relatively brief time between their writing careers, Aristotle's corpus became much better known. Al-Kindī depends largely on the first texts of the *Organon*, certain favored parts of Aristotle's works on natural philosophy, and some books of the *Metaphysics*. Al-Fārābī uses all these texts, but draws extensively on the *Ethics* too, and displays a much fuller understanding of Aristotle's logic and the *Metaphysics* (see his brief summary of the work, *On the Aims of the Philosopher*, trans. Gutas 1988: 240–2).

The *Metaphysics* was, again unsurprisingly, one of the texts which attracted most interest in the Islamic world. Its fundamental status as a work on "first philosophy" and its theoretical discussion of god were no doubt instrumental in causing it to be translated numerous times (Bertolacci 2005). When Averroes set out to write his magisterial *Long Commentary on the Metaphysics* (Bouyges 1967–73), he was able to consult multiple translations for some books, and he discusses their relative merits without, of course, being in a position to compare them to the original Greek. Within the *Metaphysics*, certain books were the focus of even more intense scrutiny. *Lambda* was of course one of these. More surprisingly to the modern reader, so was *Alpha Elatton*. Now seen as

inauthentic by some interpreters, *Elatton* was taken to be the opening book of the *Metaphysics* in the Arabic tradition. It was a chief inspiration already for al-Kindī, who makes use of it repeatedly in his own work on metaphysics, entitled *On First Philosophy* (trans. Ivry 1974, Adamson and Pormann 2012). Al-Fārābī's student Yaḥyā Ibn 'Adī wrote a commentary on only this book of the *Metaphysics* (see Martini Bonadeo 2003, Adamson 2010).

One passage from *Elatton* in particular was taken to heart by philhellenists like al-Kindī and Averroes. In chapter 1 of the book, we are urged to be grateful towards our predecessors in philosophy, even if they discerned only a little of the truth. In his *On First Philosophy*, al-Kindī adapts the passage to argue that the Greek philosophers in general, and Aristotle in particular, should be welcomed into the Islamic intellectual sphere because they are bringers of truth. He goes so far as to state that true religion requires the embrace of these thinkers, insofar as religion exhorts us to discover the truth and thus come closer to an understanding of God. Averroes would agree: in his famous *Decisive Treatise* (trans. Hourani 1961), Averroes contends that the Koran demands of those who are capable that they engage in philosophy. As for Aristotle himself, the same chapter of *Elatton* moves Averroes to remark in his commentary that the Stagirite "grasped all truth, to the extent which is natural for man to grasp, insofar as he is man" (Bouyges 1967–73, vol.1, §1g). He elsewhere claims that Aristotle achieved full human perfection by actualizing his intellect.

Aristotle was, then, admired in some circles of the Islamic world as the philosopher *par excellence*. When al-Fārābī was honored with the sobriquet "the second teacher," there was no need to say who was the first teacher—just as in the Latin medieval tradition, one could refer to Aristotle simply as "the Philosopher". One should not, however, leap to the conclusion that Aristotle was universally seen as philosophy personified. Certainly, this would have been the view of such "professional" Aristotelians as Averroes and the members of the Baghdad school. This is why they followed the Alexandrian school in churning out commentaries on Aristotle's works (see further below, and Adamson 2012a). But we do find figures who are reasonably critical of Aristotle, not only among those who attacked philosophy as such, but also among practitioners of philosophy. Notably, the aforementioned al-Rāzī clearly prefers Plato, as filtered through Galen. Avicenna engaged more positively with Aristotle, who was certainly his chief Greek source. Yet he too departed deliberately from Aristotle to formulate new systems in every area of philosophy, and in so doing became the chief philosophical figure for most of the subsequent tradition in the Islamic world (see Daiber 1997, Endress 1997, Bertolacci 2009).

A final caveat to be mentioned here is that those authors who did valorize Aristotle would not necessarily have drawn a sharp distinction between the teachings of the Aristotelian corpus and the teachings of Greek philosophy as a whole. Rather, there was a tendency to follow the Neoplatonists' commitment to the fundamental harmony of Plato and Aristotle. Of course this commitment was not shared by all Neoplatonists: as exceptions one could note especially Plotinus and Syrianus. But it was typical of the commentary tradition at Alexandria, and this tradition exerted a particular influence on the Islamic world (D'Ancona 2006). In Arabic, the most explicit defense of the agreement between Plato and Aristotle is a work ascribed to al-Fārābī with the self-explanatory title *On the Harmonization of the Opinions of the Two Sages* (trans. Butterworth 2004). The authenticity of this work has recently been disputed, however, and reasonably so given that al-Fārābī shows himself elsewhere to be fully cognizant

of the deep differences between Plato and Aristotle (Rashed 2009). Less explicitly, we can find many instances where Platonic (or Neoplatonic) ideas are woven seamlessly together with Aristotelian ones. To give only one example, treatments of the soul frequently adopt both Aristotle's claim that the soul is the form of the body and the Platonist commitment to the soul as a separate substance (for one example see Adamson and Pormann 2009). The fact that the Arabic version of Plotinus' works was mistakenly labeled as a treatise by Aristotle (see below) was more likely a symptom, rather than a cause, of this harmonizing tendency.

Hellenistic philosophy

Given that Aristotle and the Neoplatonists were the most influential Greek philosophers for the Islamic world, it is striking how little influence was exerted by the philosophers who worked between Aristotle and Plotinus. Despite occasional claims to the contrary, Hellenistic philosophy seems to have had very little impact on philosophy in Arabic. One reason for this was, as in the case of Presocratic philosophy, a lack of transmission. Several of our chief sources for Hellenistic thought, such as Cicero, Lucretius, Diogenes Laërtius, and Sextus Empiricus, were never rendered into Arabic. This is not to say that the Arabic tradition lacked all awareness of the Hellenistic schools. We have already seen that traces of Cynic philosophy passed into Arabic as part of the "wisdom literature" tradition. Of course, some of the texts we depend on for our knowledge of Hellenistic thought did make their way into the Islamic world. In addition to the aforementioned *Placita Philosophorum*, two major sources available in Arabic would have been commentaries on Aristotle and the works of Galen. Then again, neither of these sources would have conveyed a particularly positive view of the Skeptics, Stoics or Epicureans.

To begin with the Skeptics, the absence of Sextus and Cicero (and for that matter Augustine) meant that the Arabic tradition knew little or nothing of the most sophisticated output of this Hellenistic tradition. Perhaps the most significant single source for Skepticism was Galen's autobiographical account of how he *overcame* a skeptical crisis. It has been suggested that this inspired al-Ghazālī's remarks about a similar crisis of his own, in the celebrated *Deliverer from Error* (trans. Watt 1953; see Menn 2003). By contrast, an indigenous tradition of skepticism, especially regarding religious doctrine (Heck 2008), looks to have been largely or wholly independent of Greek skeptical ideas. In this theological context skepticism was in any case usually a hypothetical posture to be refuted or condemned, rather than a live philosophical option. Skepticism as a global position, whether Hellenic or not, was decidedly rare in the Islamic world. This does not rule out the possibility, however, that more specific dialectical arguments put forward by Greek skeptics could turn up in Arabic. It has, for instance, been noticed that arguments against atomism found in several Arabic authors bear a striking resemblance to anti-atomist arguments made by Sextus (Baffioni 1981).

This mention of atomism brings us to the Epicureans, who seem to have exerted even less influence in the Arabic-speaking world than did the Skeptics and Cynics. Again, texts were lacking: as just noted, neither Diogenes Laërtius, who preserves the letters of Epicurus, nor Lucretius was translated into Arabic. Nor were the ideas of the Epicureans subtly woven into Neoplatonism, as happened to some extent with Stoicism. The result is that Epicurus and his school nearly vanish from the Hellenic legacy in the Islamic world. The aforementioned Pseudo-Ammonius (drawn on by al-Shahrastānī) does men-

tion Epicurus, and transmits some solid information about him, such as his belief in void (Rudolph 1989: §XVIII). Even this entry, though, is brief and disapproving: "among the [philosophical] teachings his theory and teaching was the most disreputable and furthest from the truth." Beyond such brief notices, Epicureanism does not seem to have penetrated into the intellectual currents of the Islamic world. We should, however, mention the case of a philosopher who has already appeared as an exception to various rules: Abū Bakr al-Rāzī. In several articles, L. E. Goodman has portrayed al-Rāzī as an Epicurean philosopher who adopted a hedonistic ethics (for example, Goodman 1971). Al-Rāzī was also, unusually among philosophers writing in Arabic, an atomist. Goodman has not stressed an Epicurean background for this aspect of his thought, however, and al-Rāzī's atomism may relate rather to that of Democritus and Leucippus (Baffioni 1982, cf. Daiber 1984; the atomism widespread among Islamic theologians does not seem to relate closely to any Greek model, but is more "mathematical" in conception).

As for al-Rāzī's ethics, I have argued elsewhere that he was not adopting a hedonistic position, but rather following the position of Plato as he could have found it in the *Timaeus* (Adamson 2008). According to this position, also familiar from Plato's *Republic*, pleasure cannot be the good because its occurrence is inextricably bound up with a bad condition in the person who takes pleasure. Pleasure turns out always to supervene on the process of restoring the body from an imbalanced state to a balanced or "natural" state. While pleasure is present, then, the imbalanced state must also be present to some extent. For al-Rāzī, the "natural" state in which pain and imbalance are wholly absent is imperceptible, rather than being the most pleasant possible state as Epicurus held. He would reject, in other words, the crucial Epicurean idea of katastematic pleasure. If this interpretation is correct, al-Rāzī's practical philosophy is actually antithetical to Epicurean hedonism. His ethics could more usefully be seen as an application of the medical paradigm in which health consists in moderation or balance (hence the title of his major work in ethics: *The Spiritual Medicine*).

So far, the Hellenistic legacy in Arabic philosophy has turned out to be minimal: indirect traces of Cynicism and Skepticism, and no substantive influence from Epicureanism. That leaves Stoicism, whose impact on the Islamic world has been considered extensive enough to be the subject of an entire monograph (Jadaane 1968). Indeed it is fairly common to find scholars asserting that the deep Stoic influence on philosophy in Arabic is simply obvious (a notorious example is van den Burgh 1954). Spelling out this influence in detail is difficult, however, in part because (as with the other Hellenistic traditions) any historical connection between the Stoics and authors of the Islamic world must have been rather indirect. Furthermore, it must be said that parallels drawn to Stoicism are often rather impressionistic. In the absence of any detailed explanation of how Stoic ideas (especially technical ones) could have been transmitted into Arabic, circumspection is called for (Gutas 2000, §1, 4959).

A cautionary example can be found in the area of logic. It has been claimed that Avicenna's pioneering work on conditional propositions was an advance on ideas he took from the Stoics (Rescher 1963). Subsequently, however, it was argued that the Avicenna's treatment of conditional judgments takes its starting point in the Aristotelian tradition (Maróth 1989). More recently it has been pointed out that this very issue was discussed extensively among Muslim theologians before Avicenna. He may therefore have been responding to this indigenous discussion (Schöck 2007). That proposal, however, could in turn invite the rejoinder that, as one eminent scholar has put it, "the logic of the early [theologians]… is built on a Stoic basis" (van Ess 1970), so that

Stoic influence may have entered the story earlier than Avicenna. Again, though, one needs to be careful. One can find early theologians using technical terms that seem to reflect Greek terminology (for example, *dalīl* for *sēmeion*: ibid. 27), but this falls short of suggesting any extensive engagement with Stoic logic. The same point could be made regarding the treatment of certain Stoic themes and problems. For instance the liar paradox, so beloved of Chrysippus, was discussed in theological literature from the early period. It is still taken up by sixteenth century authors (Ziai 2005: 417) who were presumably innocent of Stoic influence, unless of a drastically mediated kind. To discuss inference from signs or argue about the liar paradox, in other words, is not necessarily to betray meaningful influence from the Stoics. More generally, we should remember that in late ancient philosophy and theology, Stoic influence was pervasive yet usually inexplicit. It is no surprise if concepts, terms and problems deriving ultimately from the Stoics found their way into Arabic smuggled in the intellectual baggage of a Plotinus, Galen, or Nemesius. Yet this should not lead us to assume that Stoicism was still a living philosophy in the Islamic world.

Neoplatonism and the commentators

We have seen several times that the Neoplatonists exerted disproportionate influence upon the reception of Greek philosophy in Arabic. This is only to be expected. As the final phase of pagan Greek philosophy, Neoplatonism naturally served as both a conduit and a filter for what came earlier. This is as true for Byzantine philosophy and Latin medieval philosophy as it is for philosophy in the Islamic world. Especially in the Byzantine and Islamic spheres, one may say that the perception of Greek philosophy itself was passed down from the Neoplatonists. At first glance, the dominance of Aristotle over Plato in the Arabic tradition looks like a radical departure from the late ancient worldview. This is the exception that proves the rule, however, since Aristotle's importance in Arabic was due in part to the large number of Neoplatonic commentaries on his works that were available from the Alexandrian tradition. As we have seen, the Neoplatonist commentators' commitment to the harmony between Plato and Aristotle survived into Arabic.

Commentaries on Aristotle were among the Greek philosophical texts most extensively translated and used in the Islamic world. This begins already with al-Kindī. Particularly well-known is his use of arguments taken from John Philoponus to disprove the eternity of the world (see Davidson 1969). He also draws on more conventional Neoplatonist commentaries, however. At the beginning of *On First Philosophy*, for instance, he repeats formulas from Alexandrian commentaries on the *Isagōgē* regarding the nature and parts of philosophy (see Ivry 1974: 116ff). For al-Kindī and many later thinkers, Porphyry's *Isagōgē* itself is a fundamental text, which retains its position as the first work in the *Organon*. Al-Kindī uses the *Isagōgē* and its classification of predicables (genus, species, etc.) not only in a discussion of "terms (*maqūlāt*)" later in *On First Philosophy*, but also in the more surprising context of a refutation of the Christian doctrine of the Trinity (Rashed and Jolivet 1998, Adamson and Pormann 2012). Al-Kindī argues that the persons of the Trinity cannot be understood as any of the Porphyrian predicables without compromising God's unity (for instance they cannot be genera, because genera are made up of many species, so ascribing a genus to God is to render Him multiple). Thus, they cannot be predicated of God at all. The wide reception achieved by the *Isagōgē* is indicated by al-Kindī when he remarks that he has used the text in part because it is familiar to his Christian opponents.

Al-Kindī's refutation of the Trinity is preserved because it was quoted, and rebutted, by the Christian Yaḥyā Ibn 'Adī. The works of Ibn 'Adī and other members of the Baghdad school represent a highpoint for the influence of Greek commentators in Arabic. One could give multiple examples here; I will mention only a few notable cases. Ibn 'Adī himself wrote a fascinating work *On the Existence of General Things* which develops the Neoplatonist theory of the three types of universals, "before, in, and after the many": that is, Platonic forms, immanent forms, and forms in the human mind (Rashed 2004, Adamson 2007d). His teacher al-Fārābī wrote epitomes and commentaries on Aristotle, especially the *Organon*, following the model of the Alexandrians (for his treatments of *On Interpretation*, for instance, see Zimmermann 1981). As already mentioned, the Baghdad school produced a commented version of the *Physics* which included their own remarks on the text and passages from the commentary of Philoponus. Engagement with the Greek commentators is as important as ever in the work of the school's final representative, Abū l-Faraj Ibn al-Ṭayyib (d.1043), who wrote voluminous commentaries on both the *Isagōgē* (Gyekye 1975, 1979) and the *Categories* (Ferrari 2006). Both are based closely on the work of Alexandrian commentators.

Almost all the commentaries on Aristotle available in Arabic (and indeed, available to us today) were written by Neoplatonists. So the use of Greek commentaries on Aristotle was a major factor in the Arabic reception of Neoplatonism. The most respected commentator on Aristotle, however, was no Neoplatonist. This was Alexander of Aphrodisias, who like his contemporary Galen authored several works that are lost in Greek but preserved in Arabic. In particular one must mention Alexander's *On the Principles of the Cosmos* (Genequand 2001) and *On Providence* (Thillet 2003), two of the most important works of ancient philosophy preserved by the Arabic tradition. These texts and other works of Alexander's were already influential on al-Kindī and the Baghdad school, but among authors writing in Arabic it was perhaps Averroes who was most cognizant of Alexander's supreme value as a commentator. In his long commentaries Averroes sometimes copied out passages from translations of his Greek forerunners. As far as Averroes was concerned Alexander was *the* commentator, just as Averroes in turn became "the Commentator" for authors writing in Latin. Averroes was unusual in his determination to eliminate Platonist accretions to the interpretation of Aristotle's works, and this may have been one reason for his esteem of Alexander. He also found value in Themistius (see for example, Taylor 2013), a commentator whose Platonist commitments are still debated but are at least less ostentatious than those of other post-Plotinian commentators.

Detailed study of the commentators was a pursuit of limited popularity. The commentaries of Alexander, Themistius and the school of Alexandria may have been indispensable to professional Aristotelians like al-Fārābī, Ibn 'Adī and Averroes, but they did not capture the imagination of a broader philosophical readership. Furthermore, faithful Aristotelianism could be a "hard sell" in the Islamic world—Aristotle's god, an intellective first cause of eternal motion, was difficult to reconcile with the majestic Creator of the Koran, and Aristotle's soul, an immanent principle of life and psychological functioning, was difficult to reconcile with the commitment to an eternal afterlife shared by all confessions in the medieval period. Of course, no ingenuity was spared in squaring these circles, but it was natural that many thinkers of the Islamic world would find the Neoplatonism of Plotinus and his successors a welcome supplement to Peripatetic philosophy. Neoplatonism offered what Aristotle did not: a soul which is unquestionably independent from the body, and a first principle whose distinctive characteristic is unity.

It is the philosophical affinity of Neoplatonism with Islam, as much as its chronological position, that explains its widespread diffusion in the Arabic-speaking world. In that diffusion the fundamental text was the so-called *Theology of Aristotle*, in fact part of an Arabic version of Plotinus' *Enneads* produced within al-Kindī's circle in the ninth century (see Zimmermann 1986, Aouad 1989, Adamson 2002, D'Ancona 2003). The misattribution to Aristotle may have resulted from a misreading of the prologue appended to the *Theology* in al-Kindī's circle (perhaps by al-Kindī himself). The prologue explains that the *Theology* forms a capstone for Aristotle's system by dealing more comprehensively with topics like those just mentioned, God and the soul. Al-Kindī himself used the Arabic Plotinus this way. For him there was no tension between Aristotle and Plotinus. His *Discourse on the Soul* explains the unanimity of Aristotle, Plato and Pythagoras in teaching that the soul is a "separate substance" derived from the "light of the Creator"; terminology and ideas from the Arabic Plotinus are used throughout the epistle. The Plotinian system was even imported into other Graeco-Arabic translations, notably the Kindī-circle version of propositions from the *Elements of Theology*. A redaction of the Arabic Proclus called *The Book of the Pure Good* was to be a chief source for Neoplatonic ideas in Christian Europe once it was translated into Latin as the *Book of Causes* (D'Ancona 1995, D'Ancona and Taylor 2003). This text brings Proclus' more baroque Neoplatonism into line with Plotinus, by simplifying the Proclan metaphysical hierarchy into the Plotinian sequence God–Intellect–Soul–Natural World.

If Plotinus was bound to be congenial to Muslim readers, the Arabic Plotinus was even more congenial. The Arabic version of the *Enneads* departs strikingly from its source in many ways that would appeal to a Muslim (or Christian) readership. Most obviously the first principle, Plotinus' One, is called "the Creator." The translation also exploits Plotinus' concern with the unity and ineffability of the One to weave in themes from contemporary Islamic religious debate, notably the problem of how divine "attributes (*ṣifāt*)" are to be accommodated in a theology that makes God utterly simple. With such shifts, the *Theology of Aristotle* was ready to be a formative text for the Platonism found in several authors of the tenth to eleventh centuries, who combine enthusiasm for Plotinus, Proclus and other Graeco-Arabic texts with a broad range of interests in religion, history and other pursuits (Adamson 2007c). This Islamized version of Neoplatonism is found in authors as diverse as the litterateur al-Tawḥīdī (d. 1023; see Rowson 1990), the historian Miskawayh (d. 1030; see Arkoun 1970), and the philosopher al-'Āmirī, a second-generation student of al-Kindī already mentioned above. Al-'Āmirī even produced a version of materials from the Arabic Proclus which weaves Islamic imagery into the Neoplatonic system (Wakelnig 2006). Figures like al-Fārābī (assuming we reject the attribution to him of the *Harmonization*, which uncritically cites the *Theology* to reconcile Plato with Aristotle) and Avicenna (who was suspicious regarding the authorship of the *Theology*) were more circumspect in their use of the Neoplatonica Arabica. Avicenna wrote a set of notes on the *Theology* which, characteristically, is neither wholly critical nor wholly in agreement with the ideas he finds there (Adamson 2004a, 2004b). The "emanationist" systems of both al-Fārābī and Avicenna, however, which envision a cosmos that proceeds necessarily and eternally from God, indicate the appropriation of Neoplatonic ideas even among philosophers who were generally more aligned with Aristotle. Later, sustained engagement with the *Theology* was central to a great revival of interest in Graeco-Arabic philosophical sources in the Safavid period (Rizvi 2007, Pourjavady 2011).

It might be fitting to conclude with a figure whose fortunes in Arabic encapsulate much that we have seen about the reception of Greek philosophy in the Islamic world:

Plotinus' student Porphyry (for what follows see Adamson 2007e). The Arabic reception of Porphyry was enthusiastic yet incomplete, like the reception of Greek philosophy as a whole. The *Isagōgē*, as we have seen, was one of the most popular texts written by any author other than Aristotle. Other works of Porphyry were also known: his *History of Philosophy* was, alongside works like the *Placita Philosophorum* and the Pseudo-Ammonius, a source of doxographical information regarding Greek thought. A treatise *On the Intellect and the Intelligible*—perhaps the refutation of Longinus Porphyry mentions in his *Life of Plotinus*—was also known and earned disdainful mention from Avicenna. Porphyry's lasting legacy to the Islamic world, however, was his synthetic approach to philosophy. As the first Platonist to write commentaries on Aristotle (Karamanolis 2004), Porphyry promoted the carefully circumscribed but sympathetic study of Aristotle within the Neoplatonic curriculum. As we've seen this trend continued and even increased in the Arabic tradition. The practicioners of *falsafa* tended toward a model pioneered by Porphyry: the fundamental commitment to Neoplatonism does not prevent minute analysis of Aristotle's works, while Pre-Socratics are honored as figureheads and the three main Hellenistic schools are either criticized or passed over in silence. It is not inappropriate that Porphyry was mentioned so critically by Avicenna. For Avicenna, despite his close engagement with Aristotle and Neoplatonism, did more than most to move philosophy in the Islamic world away from this Porphyrian style of engagement with Greek philosophy—or rather, with a version of Greek philosophy that had emerged from the complex process of selection, translation, alteration, and systematization which had been going on for many centuries before Avicenna's birth.

References and further reading

Adamson, P. (2002) *The Arabic Plotinus: A Philosophical Study of the "Theology of Aristotle"*, London: Duckworth.

Adamson, P. (2004a) "Non-Discursive Thought in Avicenna's Commentary on the *Theology of Aristotle*," in J. McGinnis (ed.), *Interpreting Avicenna: Science and Philosophy in Medieval Islam*, Leiden: Brill. 87–111.

Adamson, P. (2004b) "Correcting Plotinus: Soul's Relationship to Body in Avicenna's Commentary on the *Theology of Aristotle*," in P. Adamson, H. Baltussen and M. W. F. Stone (eds.) *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, in two volumes, London: Institute of Classical Studies. Vol. 2: 59–75.

Adamson, P. (2007a) "The Arabic Socrates: The Place of al-Kindī's Report in the Tradition," in M. Trapp (ed.) *Socrates from Antiquity to the Enlightenment*, Aldershot: Ashgate. 161–78.

Adamson, P. (2007b) *Al-Kindī*, New York: Oxford University Press.

Adamson, P. (2007c) "The Kindian Tradition: The Structure of Philosophy in Arabic Neoplatonism," in C. D'Ancona (ed.) *Libraries of the Neoplatonists*, Leiden: Brill. 351–70.

Adamson, P. (2007d) "Knowledge of Universals and Particulars in the Baghdad School," *Documenti e Studi sulla Tradizione Filosofica Medievale* 18: 141–64.

Adamson, P. (2007e) "*Porphyrius Arabus* on Nature and Art: 463F Smith in Context," in G. Karamanolis and A. Sheppard (eds) *Studies on Porphyry*, London: Institute of Classical Studies. 141–163.

Adamson, P. (2008) "Platonic Pleasures in Epicurus and al-Rāzī," in P. Adamson (ed.), *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century*, London: Warburg Institute. 71–94.

Adamson, P. (2010) "Yaḥyā Ibn 'Adī and Averroes on *Metaphysics* Alpha Elatton," *Documenti e Studi sulla Tradizione Filosofica Medievale* 21: 343–74.

Adamson, P. (2012a) "Aristotle in the Arabic Commentary Tradition," in C. Shields (ed.) *The Oxford Companion to Aristotle*, Oxford: Oxford University Press. 645–64.

Adamson, P. (2012b) "Galen and al-Rāzī on Time," in R. Hansberger and C. Burnett (eds.) *Medieval Arabic Thought: Essays in Honour of Fritz Zimmermann*, London: Warburg Institute. 1–14.

Adamson, P. (2013) "Galen on Void," in P. Adamson, R. Hansberger and J. Wilberding (eds.) *Philosophical Themes in Galen*, London: Institute of Classical Studies. 197–211.

Adamson, P. and Pormann, P. E. (2009) "Aristotle's *Categories* and the Soul: An Annotated Translation of al-Kindī's *That There Are Separate Substances*," in J.M. Dillon and M. Elkaisy-Friemuth (eds.) *The Afterlife of the Platonic Soul. Reflections of Platonic Psychology in the Monotheistic Religions*, Leiden: Brill. 95–106.
Adamson, P. and Pormann, P. E. (2012) *The Philosophical Works of al-Kindī*, Karachi: Oxford University Press.
Adamson, P. and Taylor, R. C. (eds.) (2005) *The Cambridge Companion to Arabic Philosophy*, Cambridge: Cambridge University Press.
Alon, I. (1991) *Socrates in Mediaeval Arabic Literature*, Leiden: Brill.
Alon, I. (1995) *Socrates Arabus*, Jerusalem: Hebrew University.
Arkoun, M. (1970) *L'humanisme arabe au IVe/Xe siècle: Miskawayh, philosophe et historien*, Paris: Vrin.
Arnzen, R. (2009a) "Arabisches Mittelalter," in C. Horn, J. Müller, and J. Söder (eds.) *Platon-Handbuch: Leben, Werk, Wirkung*, Stuttgart: J. B. Metzler. 439–45.
Arnzen, R. (2009b) "On the Contents, Sources and Composition of Two Arabic Pseudo-Platonica: *Mulṭaqaṭāt Aflāṭūn al-ilāhī* and *Fiqar ulṭuqiṭat wa-jumi'at 'an Aflāṭūn*," *Oriens* 37: 7–52.
Aouad, M. (1989) "La '*Théologie d'Aristote*' et autres textes du Plotinus Arabus," in R. Goulet (ed.), *Dictionnaire des Philosophes antiques I*, Paris: CNRS. 541–590.
Badawī, A. (ed.) (1964–65) *Arisṭūṭālīs: al-Ṭabī'a*, in two volumes, Cairo: al-Dār al-Qawmiyya.
Baffioni, C. (1981) "Per l'ipotesi di un influsso della scepsi sulla filosofia Islamica" in G. Giannantoni (ed.), *LoScetticismo Antico*, Naples: Bibliopolis. 415–434.
Baffioni, C. (1982) *Atomismo e antiatomismo nel pensiero islamico*, Naples: Istituto universitario orientale.
Bertolacci, A. (2005) "On the Arabic Translations of Aristotle's *Metaphysics*," *Arabic Sciences and Philosophy* 15: 241–75.
Bergsträsser, G. (1925) *Ḥunain ibn Isḥāq über die syrischen und arabischen Galen-Übersetzungen*, Leipzig: Brockhaus.
Bertolacci, A. (2009) "Different Attitudes to Aristotle's Authority in the Arabic Medieval Commentaries on the *Metaphysics*," *Antiquorum Philosophia* 3: 145–63.
Bouyges, M. (ed.) (1967–73) *Averroès:Tafsīr Mā Ba'd aṭ-Ṭabī'at*, in four volumes, Beirut: Imprimerie Catholique. Second edition.
Brock, S. (1993) "The Syriac Commentary Tradition," in C. Burnett (ed.) *Glosses and Commentaries on Aristotelian Logical Texts: The Syriac, Arabic and Medieval Latin Traditions*, London: Warburg Institute: 3–18.
Butterworth, C. (2004) *Alfarabi: The Political Writings. Selected Aphorisms and Other Texts*, Ithaca, NY: Cornell University Press.
Daiber, H. (1980) *Aëtius Arabus. Die Vorsokratiker in arabischer Überlieferung*, Wiesbaden: Steiner.
Daiber, H. (1984) "Democritus in Arabic and Syriac Tradition," in *Proceedings of the 1st International Congress on Democritus*, in two volumes, Xanthi: International Democritean Foundation. Vol. 2: 251–65.
Daiber, H. (1997) "Salient Trends of the Arabic Aristotle," in G. Endress and R. Kruk (eds.) *The Ancient Tradition in Christian and Islamic Hellenism*, Leiden: Research School CNWS. 31–41.
D'Ancona, C. (1995) *Recherches sur le Liber de Causis*, Paris: Vrin.
D'Ancona, C. (ed.) (2003) *Plotino, La discesa dell'anima nei corpi (Enn. IV 8[6])*, Padua: Il Poligrafo.
D'Ancona, C. (2006) "The Topic of the 'Harmony Between Plato and Aristotle': Some Examples in Early Arabic Philosophy," in A. Speer (ed.), *Wissen über Grenzen. Arabisches Wissen und lateinisches Mittelalter*, Berlin: De Gruyter. 379–405.
D'Ancona, C. and Taylor, R. C. (2003) "Le *Liber de Causis*," in R. Goulet (ed.) *Dictionnaire des Philosophes antiques: Supplement*, Paris: CNRS. 599–647.
Davidson, H. A. (1969) "John Philoponus as a Source of Medieval Islamic and Jewish Proofs of Creation," *Journal of the American Oriental Society* 89: 357–91.
De Smet, D. (1998) *Empedocles Arabus. Une lecture néoplatonicienne tardive*, Brussels: Paleis de Academiën.
Endress, G. (1987/1992) "Die wissenschaftliche Literatur," in H. Gätje (ed.) *Grundriss der arabischen Philologie*, Wiesbaden: Ludwig Reichert. Vol. 2, 400–506, vol. 3: 3–152.
Endress, G. (1997) "L'Aristote arabe. Réception, autorité et transformation du Premier Maître," *Medioevo* 23, 1–42.
Fakhry, M. (1963) "Al-Kindī wa-l-Suqrāṭ," *Al-abḥāth* 16: 23–34.
Ferrari, C. (2006) *Die Kategorienkommentar von Abū l-Farāj 'Abdallāh ibn aṭ-Ṭayyib*, Leiden: Brill.
Genequand, C., trans. (2001) *Alexander of Aphrodisias on the Cosmos*, Leiden: Brill.
Giannakis, E. (2008) "Anaxagoras in the Baghdad *Physics*," in P. Adamson (ed.) *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century*, London: Warburg Institute: 35–50.
Gimaret, D. and Monnot, G., trans. (1986) *al-Shahrastānī: Livre des religions et des sects*, Paris: Peeters.

Goodman, L. E. (1971) "The Epicurean Ethic of Muḥammad Ibn Zakariyā' ar-Rāzī," *Studia Islamica* 34: 5–26.
Guidi, M. and Walzer, R. (1940) *Uno Scritto Introduttivo allo Studio di Aristotele*, Rome: Reale Accademia Nazionale dei Lincei.
Gutas, D. (1975) *Greek Wisdom Literature in Arabic Translation: A Study of the Graeco-Arabic Gnomologia*, New Haven: American Oriental Society.
Gutas, D. (1981) "Classical Arabic Wisdom Literature: Nature and Scope," *Journal of the American Oriental Society* 101: 49–86.
Gutas, D. (1982a) "The Present State and Future Tasks of Graeco-Arabic Studies: Remarks Apropos H. Daiber's *Aëtius Arabus*," *Journal of the Royal Asiatic Society*: 113–23.
Gutas, D. (1982b) "The *Ṣiwān al-Ḥikma* Cycle of Texts," *Journal of the American Oriental Society* 102: 645–50.
Gutas, D. (1988) *Avicenna and the Aristotelian Tradition*, Leiden: Brill.
Gutas, D. (1998) *Greek Thought, Arabic Culture: The Graeco-Arabic Translation movement in Baghdad and early society (2nd–4th/8th–10th centuries)* London: Routledge.
Gutas, D. (1999) "The 'Alexandria to Baghdad' complex of narratives. A contribution to the study of philosophical and medical historiography among the Arabs," *Documenti e Studi sulla Tradizione Filosofica Medievale* 10: 155–193.
Gutas, D. (2000) *Greek Philosophers in the Arabic Tradition*, Aldershot: Variorum.
Gyekye, K. (ed.) (1975) *Ibn al-Ṭayyib's Commentary on Porphyry's Eisagoge*, Beirut: Dar el-Machreq.
Gyekye, K. trans. (1979) *Arabic Logic: Ibn al-Ṭayyib's Commentary on Porphyry's Eisagoge*, Albany: SUNY Press.
Harvey, S. (2003) "Did Alfarabi Read Plato's *Laws*?" *Medioevo* 28: 51–68.
Hasse, D. N. (2002) "Plato Arabico-Latinus: Philosophy, Wisdom Literature, Occult Sciences," in S. Gersh, M. J. F. M. Hoenen, and P. T. van Wingerden (eds.) *The Platonic Tradition in the Middle Ages. A Doxographic Approach*, Berlin: De Gruyter. 31–64.
Heck, P. L. (2008) "Doubts About the Religious Community (*Milla*) in al-Fārābī and the Brethren of Purity," in P. Adamson (ed.) *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century*, London: Warburg Institute. 195–213.
Hourani, G. F., trans. (1961) *Averroes: On the Harmony of Religion and Philosophy*, London: Luzac.
Hugonnard-Roche, H. (1987) "Sur les versions syriaques des *Catégories* d'Aristote," *Journal Asiatique* 275: 205–22.
Ivry, A. (1974) *Al-Kindi's Metaphysics*, Albany: SUNY Press.
Jadaane, F. (1968) *L'influence du Stoïcisme sur la pensêe musulmane*, Beirut: Dar El-Machreq.
Jolivet, J. (2004) "*L'Épître sur la quantité des livres d'Aristote* par al-Kindī (une lecture)," in R. Morelon and A. Hasnawi (eds.) *De Zénon d'Élée à Poincaré: Recueil d'études en homage à Roshdi Rashed*, Louvain: Peeters: 665–683.
Karamanolis, G. (2004) "Porphyry: the First Platonist Commentator on Aristotle," in P. Adamson, H. Baltussen and M. W. F. Stone (eds.) *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, in two volumes, London: Institute of Classical Studies. Vol. 1: 91–113.
Kazi, A. K. and Flynn, H. G., trans. (1984) *al-Shahrastānī: Muslim Sects and Divisions*, London: Kegan Paul.
Klein-Franke, F. (1973) "Zur Überlieferung der platonischen Schriften im Islam," *Israel Oriental Studies* 3: 120–39.
Kraus, P. (ed.) (1939) *Al-Rāzī: Rasā'il falsafiyya* (*Opera philosophica*), Cairo: Imprimerie Paul Barbey.
Larrain, C. J. (1992) *Galens Kommentar zu Platons Timaios*, Stuttgart: Teubner.
Lettinck, P. (1994) *Aristotle's Physics and Its Reception in the Arabic World*, Leiden: Brill.
Mahdi, M. (2001) *Alfarabi: Philosophy of Plato and Aristotle*, Ithaca, NY: Cornell Press. Second edition.
Maróth, M. (1989) *Ibn Sīnā und die peripatetische "Aussagenlogik,"* Leiden: Brill.
Martini Bonadeo, C. (2003) "Un commento ad *alpha elatton* 'sicut litterae sonant' nella Baghdad del X secolo," *Medioevo* 28: 69–96.
McGinnis, J. and Reisman, D. C. (2007) *Classical Arabic Philosophy: An Anthology of Sources*, Indianapolis: Hackett.
Menn, S. (2003) "The Discourse on the Method and the Tradition of Intellectual Autobiography," in J. Miller and B. Inwood (eds.) *Hellenistic and Early Modern Philosophy*, Cambridge: Cambridge University Press: 141–91.
Pasnau, R. (ed.) (2010) *The Cambridge History of Medieval Philosophy*, in two volumes, Cambridge: Cambridge University Press.

Pines, S. (1954) "A Tenth Century Philosophical Correspondence," *Proceedings of the American Society for Jewish Research* 23, 103–136.
Platti, E. (1983) *Yaḥyā Ibn 'Adī: Théologien chrétien et philosophe arabe*, Leuven: Departement Oriëntalistiek.
Pourjavady, R. (2011) *Philosophy in Early Safavid Iran. Najm al-Dīn Maḥmūd al-Nayrīzī and his Writings*, Leiden: Brill.
Rashed, R. and Jolivet, J. (1998) *Oeuvres Philosophiques & Scientifiques d'al-Kindī. Volume 2, Métaphysique et cosmologie*, Leiden: Brill.
Rashed, M. (2004) "Ibn 'Adi et Avicenne: sur les types d'existants," in V. Celluprica and C. D'Ancona (eds.) *Aristotele e i suoi esegeti Neoplatonici*, Naples: Bibliopolis: 109–71.
Rashed, M. (2009) "On the Authorship of the Treatise on the Harmonization of the Opinions of the Two Sages Attributed to Al-Fārābī," *Arabic Sciences and Philosophy* 19: 43–82.
Rescher, N. (1963) "Avicenna on the logic of 'conditional' propositions," *Notre Dame Journal of Formal Logic* 4, 48–58. [Reprinted in Rescher, *Studies in the History of Arabic Logic*, Pittsburgh: University of Pittsburgh Press, 1963.]
Rizvi, S. (2007) "(Neo)Platonism Revived in the Light of the Imams: Qāḍī Sa'īd Qummī (d. AH 1107/AD 1696) and his Reception of the *Theologia Aristotelis*," in P. Adamson (ed.) *Classical Arabic Philosophy: Sources and Reception*, London: Warburg Institute. 176–207.
Reisman, D. C. (2004) "Plato's Republic in Arabic: A Newly Discovered Passage," *Arabic Sciences and Philosophy* 14: 1–56.
Rosenthal, F. (1940) "On the Knowledge of Plato's Philosophy in the Islamic World," *Islamic Culture* 14: 387–422.
Rosenthal, F. and Walzer, R., (eds.) (1953) *Plato Arabus II. Alfarabius de Platonis philosophia*, London: Warburg Institute.
Rowson, E. (1988) *A Muslim Philosopher on the Soul and Its Fate: al-'Āmirī's Kitāb al-Amad 'alā l-abad*, New Haven: American Oriental Society.
Rowson, E. (1990) "The Philosopher as Littérateur: al-Tawḥīdī and his Predecessors," *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften* 6: 50–92.
Rudolph, U. (1989) *Die Doxographie des Pseudo-Ammonios: ein Beitrag zu neuplatonischen Überlieferung im Islam*, Stuttgart: Steiner.
Schöck, C. (2007) "Discussions on Conditional Sentences from the Year AH 17/AD 638 to Avicenna (d. AH 428/AD 1037)," in P. Adamson (ed.) *Classical Arabic Philosophy: Sources and Reception*, London: Warburg Institute. 55–73.
Schröder, H. O. (1934) *Galeni In Platonis Timaeum commentarii fragmenta*, Leipzig: Teubner.
Singer, D. W. (1946) "Alchemical Texts Bearing the Name of Plato," *Ambix* 2: 115–28.
Strohmaier, G. (1974) "'Die arabische Sokrateslegende und ihre Ursprünge', in P. Nagel (ed.) *Studia Coptica*, Berlin: Akademie Verlag. 121–36.
Taylor, R. C. (2013) "Themistius and the Development of Averroes' Noetics," in J.-M. Counet and R. L. Friedman (eds.) *Soul and Mind. Medieval Perspectives on Aristotle's De Anima*, Leuven: Peeters: 1–38.
Thillet, P., trans. (2003) *Alexandre d'Aphrodise:Traité de la providence*, Lagrasse: Verdier.
van den Burgh, S. (1954) *Averroes' Tahafut al-Tahafut*, Oxford: Oxford University Press.
van Ess, J. (1970) "The Logical Structure of Islamic Theology," in G. E. von Grunebaum (ed.) *Logic in Classical Islamic Culture*, Wiesbaden: Harrassowitz: 21–50.
Wakelnig, E. (2006) *Feder, Tafel, Mensch. Al-'Āmirīs Kitāb al-Fuṣūl fī l-Ma'ālim al-ilāhīya und die arabische Proklos-Rezeption im 10. Jh.*, Leiden: Brill.
Walzer, R. and Kraus, P. (eds.) (1951) *Plato Arabus I. Galeni compendium Timaei Platonis*, London: Warburg Institute.
Watt, W. M. (1953) *The Faith and Practice of al-Ghazālī*, London: George Allen.
Wisnovsky, R. (2003) *Avicenna's Metaphysics in Context*, London: Duckworth.
Ziai, H. (2005) "Recent Trends in Arabic and Persian Philosophy," in P. Adamson and R. C. Taylor (eds.) *The Cambridge Companion to Arabic Philosophy*, Cambridge: Cambridge University Press: 405–25.
Zimmermann, F. W. (1981) *Al-Farabi's Commentary and Short Treatise on Aristotle's De Interpretatione*, Oxford: Oxford University Press.
Zimmerman, F. W. (1986) "The Origins of the So-Called Theology of Aristotle," in J. Kraye et al. (eds.) *Pseudo-Aristotle in the Middle Ages*, London: Warburg Institute: 110–240.

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